



OSUN STATE UNIVERSITY, OSOGBO

**COLLEGE OF SCIENCE, ENGINEERING AND
TECHNOLOGY**

DEPARTMENT OF CHEMICAL ENGINEERING

B. Eng. (Hons) Chemical Engineering

**OVERVIEW OF COURSE STRUCTURE FOR B. ENG. CHEMICAL ENGINEERING
PROGRAMME**

100 Level Harmattan Semester

Course Code	Course Title	Units	Status
CHM 101	General Chemistry I	3	C
CHM 107	Experimental Chemistry I	1	C
MTH 101	General Mathematics I	3	C
PHY 101	General Physics I	3	C
PHY 107	Experimental Physics I	1	C
CVE 101	Engineer in Society	2	R
MEE 101	Engineering Drawing I	2	R
GNS 101	Use of English I	2	R
GNS 103	Use of Library	1	R
	Total Units	18	

100 Level Rain Semester

Course Code	Course Title	Units	Status
CHM 102	General Chemistry II	3	C
CHM 108	Experimental Chemistry II	1	C
MTH 102	General Mathematics II	3	C
MTH 104	General Mathematics III	3	C
PHY 102	General Physics II	3	C
PHY 108	Experimental Physics II	1	C
MEE 102	Workshop Technology I	2	R
MEE 104	Engineering Drawing II	2	R
GNS 102	Use of English II	2	R
GNS 104	Nigerian People & Culture	2	R
	Total Units	22	

200 Level Harmattan Semester

Course Code	Course Title	Pre-Req.	Units	Status
CSC 201	Structured Programming	-	3	C
EEE 201	Applied Electricity I	-	2	C
EEE 231	Engineering Mathematics I	MTH101, MTH102, MTH104	3	C
EEE 291	Applied Electricity Laboratory I	-	1	C
MEE 201	Engineering Materials	-	2	C
MEE 203	Engineering Mechanics I (Statics)	-	2	C
MEE 207	Basic Thermodynamics	-	3	C
STA 221	Statistics for Physical Sciences and Engineering	-	3	C
GNS 203	Introduction to Entrepreneurial Skills	-	2	R
GNS 211	Basic French		2	R
	Total Units		23	

200 Level Rain Semester

Course Code	Course Title	Pre-Req.	Units	Status
CHE 202	Industrial Process Calculations	-	3	C
CVE 206	Strength of Materials	-	3	C
EEE 202	Applied Electricity II	-	2	C
EEE 232	Engineering Mathematics II	EEE231	3	C
EEE 292	Applied Electricity Lab II	-	1	C
MEE 204	Engineering Mechanics II (Dynamics)	MEE203	2	C
MEE 206	Basic Fluid Mechanics		2	C
MEE 208	Workshop Technology II	MEE104	2	C
GNS 204	Logic and Philosophy	-	2	R
GNS 212	Introduction to Information and Communication Technology	-	2	R
	Total Units		22	

CHE 200: SWEP I (Vacation Period)

8 weeks

300 Level Harmattan Semester

Course Code	Course Title	Pre-Req.	Units	Status
EEE 331	Engineering Mathematics III	EEE 231	3	C
CHE 301	Transport Phenomenal I	-	4	C
CHE 303	Separation Processes I	-	3	C
CHE 305	Chemical Kinetics	-	3	C
CHE 307	Chemical Engineering Thermodynamics I	MEE 206	2	C
CHM 205	Physical Chemistry I	-	2	C
CHM 207	Inorganic Chemistry I	-	2	C
CHM 215	Analytical Chemistry	-	2	C
	Total Units		21	

300 Level Rain Semester

Course Code	Course Title	Pre-Req.	Units	Status
EEE 332	Engineering Mathematics IV	EEE231, EEE232, EEE 331	3	C
CHE 302	Principles of Biochemical Engineering	-	4	C
CHE 304	Polymer Science and Technology	-	3	C
CHE 306	Reaction Engineering	CHE307	4	C
CHE 308	Chemical Engineering Thermodynamics II	CHE 309	3	C
CHE 392	Chemical Engineering Lab I	CHE303, CHE307, CHE 309	2	C
CHM 202	Organic Chemistry I		2	C
CHM 292	Experimental Physical/Organic Chemistry		1	C
	Total Units		22	

CHE 300: SWEP II (Vacation Period)

8weeks

400 Level Harmattan Semester

Course Code	Course Title	Pre-Req.	Units	Status
CVE 401	Technical Report Writing	-	2	C
CHE 401	Transport Phenomena II	CHE 301	4	C
CHE 403	Chemical Engineering Analysis	-	3	C
CHE 405	Separation Processes II	CHE 303	4	C
CHE 407	Process Modelling and Simulation	-	2	C
CHE 409	Particulate Mechanics	-	2	C
CHE 411	Detergent Processing Technology	-	2	C
CHE 491	Chemical Engineering Lab II	CHE 301, CHE 303, CHE 306	2	C
	Total Units		21	

400 Level Rain Semester

Course Code	Course Title	Pre-Req.	Units	Status
CHE 200	SWEP I		2	C
CHE 300	SWEP II	CHE 200	2	C
CHE 400	Student (Supervised) Industrial Work Experienced Scheme (SIWES)	CHE 300	6	C
	Total Units		10	

500 Level Harmattan Semester

Course Code	Course Title	Pre-Req.	Units	Status
CHE 501	Project I		3	C
CHE 503	Process Dynamics		2	C
CHE 505	Environmental Engineering		3	C
CHE 507	Process Design I		3	C
CHE 591	Chemical Engineering Lab III	CHE 401, CHE 405	2	C
CVE 511	Industrial Economics		2	C
CVE 513	Industrial Law and Management		2	C
ELECTIVES: At least one of the following				
CHE 513	Technology of Fossil Fuel Processing		3	E
CHE 515	Coal Processing Technology		3	E
CHE 517	Sugar Processing Technology		3	E
CHE 519	Cement Processing Technology		3	E
Total Units			20	

500 Level Rain Semester

Course Code	Course Title	Pre-Req.	Units	Status
CHE 502	Project II		3	C
CHE 504	Process Control	CHE 503	2	C
CHE 506	Process Optimization		3	C
CHE 508	Process Design II		4	C
CHE 510	Loss Prevention in Process Industries		3	C
CHE 512	Separation Processes III	CHE 303, CHE 405	3	C
ELECTIVES: At least one of the following				
CHE 514	Fermentation Technology		3	E
CHE 516	Pulp and Paper Technology		3	E
CHE 518	Reservoir Engineering		3	E
CHE 520	Biotechnology		3	E
Total Units			21	

B.Eng. Chemical Engineering

100 Level Harmattan Semester

Course Code	Course Title	Units	Status	LH	PH
GST 111	Communication in English	2	C	15	45
CHM 101	General Chemistry I	2	C	30	0
CHM 107	General Chemistry Practical I	1	C	0	45
MTH 101	Elementary Mathematics I	2	C	30	0
MTH 103	Elementary Mathematics III	2	C	30	0
PHY 101	General Physics I	2	C	30	0
PHY 103	General Physics III	2	C	30	0
PHY 107	General Physics Practical I	1	C	0	45
COS 101	Introduction to Computing Sciences	3	C	30	45
GET 101	Engineer in Society	1	C	15	0
TCH 101	Introduction to Chemical Engineering	2	C	30	0
STA 111	Descriptive Statistics	3	C	45	0
	TOTAL	23			

100 Level Rain Semester

Course Code	Course Title	Units	Status	LH	PH
GST 112	Nigerian Peoples and Culture	2	C	30	0
CHM 102	General Chemistry II	2	C	30	0
CHM 108	General Chemistry Practical II	1	C	0	45
MTH 102	Elementary Mathematics II	2	C	30	0
PHY 102	General Physics II	2	C	30	0
PHY 104	General Physics IV	2	C	30	0
PHY 108	General Physics Practical II	1	C	0	45
COS 102	Problem Solving	2	C	30	0
GET 102	Engineering Graphics and Solid Modelling I	2	C	15	45
STA 112	Probability I	3	C	45	0
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