FIRST SEMESTER COURSE OUTLINE FOR 100 LEVEL

Course code	Course title	Lecture/ Tutorial HR/WK	Practical Studio HR/WK	Semester Credit Unit	Status
MTH 101	Elementary Math I (Algebra, Geometry & Dynamics)	3	-	3	C
STAT 101	Statistics for Physical Sciences & Engineering	3	-	3	C
CSC 101	Introduction to Computer Sc.	2	-	2	C
PHY 101	General Physics I	3	-	3	C
PHY 102	General Physics II (Electricity And Magnetism)	3	-	3	C
CHM 101	General Chemistry (Inorganic Chem.)	3	-	3	C
GST 101	Use of English and Library	4	-	4	C
GST 102	Logic and Philosophy	2	-	2	C
	Total	**23**	**-**	**23**	

SECOND SEMESTER COURSE OUTLINE FOR 100 LEVEL

Course code	Course title	Lecture/ Tutorial HR/WK	Practical Studio HR/WK	Semester Credit Unit	Status
MTH 111	Elementary Mathematics II (Algebra, Geometry & Dynamics)	3	-	3	C
MTH 112	Elementary Math III	3	-	3	C
MTH 113	Statistics	3	-	3	C
PHY 111	Kinetic Theory I	2	-	2	C
CHM 112	General Chemistry (Organic Chemistry)	3	-	3	C
GEE 112	Basic Engineering Workshop	2		2	C
GST 111	Nigeria Peoples and Culture	2	3	2	C
GST 112	History and Philosophy of Science	2	-	2	C
PHY 103	General Physics Lab		6	2	C
CHM 102	General Chemistry Lab		6	2	C
	Total	**20**	**15**	**24**	

FIRST SEMESTER COURSE OUTLINE FOR 200 LEVEL

Course code	Course title	Lecture/ Tutorial HR/WK	Practical Studio HR/WK	Semester Credit Unit	Status	Pre-requisite
GEE 201	Basic Electrical Engineering I	2	-	2	C	PHY 102
GEE 202	Engineering Mechanics	2	-	2	C	MTH 101, 111
GEE 204	Engineering Drawing	1	3	2	C	-
GEE 205	Workshop Practice I	1	3	2	C	GEE 112
GEE 206	Computer and Computing	2	-	2	C	CSC 101
GEE 207	Engineering Mathematics I	2	-	2	C	MTH 101, 111
GEE 221	Basic Electrical Engineering Practical	-	3	1	C	-
GEE 222	Engineering Mechanics Practical	-	3	1	C	-
GST 222	Peace and Conflicts Resolution	2	-	2	R	
ENT 201	Entrepreneurial Studies I	2	-	2	R	-
GEE 203	Basic Civil Engineering	1	-	1	R	-
GEE 208/ CHM 201	General Chemistry II	2	-	2	E	CHM 101, 102
	Total			**21**		

SECOND SEMESTER COURSE OUTLINE FOR 200 LEVEL

Course code	Course title	Lecture/ Tutorial HR/WK	Practical Studio HR/WK	Semester Credit Unit	Status	Pre-requisite
GEE 211	I.T in Engineering	2	-	2	C	-
GEE 212	Material Science	2	-	2	C	MTH 111, PHY 111
GEE 213	Fluid Mechanics I	2	-	2	C	-
GEE 214	Engineer in Society	1	-	1	R	-
GEE 215	Engineering Thermodynamics	2	-	2	C	-
GEE 216	Strength of Materials I	2	-	2	C	-
GEE 217	Engineering Mathematics II	2	-	2	C	MTH 111, PHY 101
ENT 211	Entrepreneurial Studies II	2	-	2	R	-
GEE 232	Material Science Practical	-	3	1	C	-
GEE 233	Fluid Mechanics Practical	-	3	1	C	-
GEE 235	Engineering Thermodynamics Practical	-	3	1	C	-
GEE 236	Strength of Materials I Practical	-	3	1	C	-
GEE 299	Students' Industrial Work Experience I			2	C	
	Total			**21**		

FIRST SEMESTER COURSE OUTLINE FOR 300 LEVEL

Course Code	Course Title	L	T	P	Course Credit Units	Pre-requisite
ELE 301	Electrical Circuit Theory I	3	-		3	GEE 201
ELE 302	Electronic Circuit Theory I	3	-		3	GEE 201
ELE 303	Electrical Machines I	2	-		2	GEE 201
ELE 304	Physical Electronics	3	-		3	
ELE 305	Electrical Machines Laboratory	-	-	2	1	
ELE 306	Electronic Circuit Laboratory	-	-	2	1	
ELE 307	Measurement & Instrumentation	3			3	
ELE 308	Computer Network and Services	3	-		3	GEE 206
GEE 307	Engineering Mathematics III	3			3	
	Total Units				**22**	

SECOND SEMESTER COURSE OUTLINE FOR 300 LEVEL

Course Code	Course Title	L	T	P	Course Credit Units	Pre-requisite
ELE 311	Electrical Circuit Theory II	3	-	-	3	GEE 201
ELE 312	Electronic Circuit Theory II	3	3		3	
ELE 313	Electrical Machines II	2	-		2	
ELE 314	Solid State Electronics	2			2	
ELE 315	Digital Electronics Laboratory	-	-	2	1	
ELE 316	Telecommunication Laboratory	-	-	2	1	
ELE 317	Digital Electronics Circuit	2	-		2	
ELE 318	Numerical Methods	3	-		3	
GEE 317	Engineering Mathematics IV	3	-		3	
GEE 399	Students' Work Experience Programme			2	2	
	Total Units				22	
Total Units (First & Second Semester)					**44**	

400 LEVEL COURSE OUTLINE

Course Code	Course Title	L	T	P	Course Credit Units	Pre-requisite
First Semester						
ELE 401	Control Theory	2	-	-	2	
ELE 402	Communication Principle	3	-	-	3	
ELE 403	Electrical Power Principle	3	-	-	2	ELE 303, 313
ELE 404	Electromagnetic Fields & Waves	3	-	-	3	ELE 314
ELE 405	Electrical & Electronics Lab.	-	-	6	3	ELE 305, 306,315,316
ELE 406	Engineering Mathematics V	2	-	-	2	GEE 307, 318
ELE 407	Digital devices and logic circuit	2	-	-	2	ELE 317
ELE 408	Advanced circuit Techniques	2	-	-	2	
ELE 409	Engineering Mathematics VI	2	-	-	2	
	Total Units				21	
Second Semester						
ELE 499	Industrial Training			6	6	
Total Units (First & Second Semester)					**27**	

FIRST SEMESTER COURSE OUTLINE FOR 500 LEVEL

Course Code	Course Title	L	T	P	Course Credit Units	Pre-requisite
ELE 501	Control Engineering	2	-	-	2	ELE 401
ELE 502	Reliability Engineering	2	-	-	2	
ELE 503/ 513	Project	-	-	6	6	
ELE 505	Electrical Service design	2	-	-	2	ELE 303
ELE 506	Power Electronics and devices	2	-	-	2	ELE 313
ELE 507	Industrial Electronic design	2	-	-	2	
ELE 509	Analogue and Digital Computer	2	-	-	2	
Power Option						
ELE 504	Electromechanical Devices Design	2	-	-	2	ELE 303/313
ELE 521	Electric drives	2	-	-	2	
Electronic Option						
ELE 508	Communication Systems	2	-	-	2	ELE 402
ELE 522	Antenna & Propagation	2	-	-	2	ELE 404
Required Option						
CTE 506	Engineering Economics	2			22	
	Total Units				**28**	

SECOND SEMESTER COURSE OUTLINE FOR 500 LEVEL

Course Code	Course Title	L	T	P	Course Credit Units	Pre-requisite
ELE 511	Advance Computer Programming and Statistics	2	-	-	2	
ELE 512	Communication System	2	-	-	2	ELE 402
ELE 514	Power System Engineering	2	-	-	2	ELE 403
ELE 515	Power System Communication and Control	2	-	-	2	
ELE 518	Telecommunication Engineering	2	-	-	2	
ELE 519	Artificial Intelligence	3	-	-	3	
Power Option						
ELE 516	Switching and High Voltage Engineering	2	-	-	2	
ELE 532	Power System Engineering	2			2	
Electronic Option						
ELE 517	Micro-computer Hardware And Software Techniques	2	-	-	2	
ELE 531	Digital Signal Processing	2	-	-	2	
Required Option						
CTE 517	Engineering Law	2			23	
	Total Units				24	
Total Units (First and Second Semesters)					**52**	