Course Outline

100 LEVEL

FIRST SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	LH	TH	PH
AMS 101	General Mathematics I	C	Nil	3	2	1	0
CHM 101	General Chemistry I	C	Nil	3	2	1	0
CHM 103	Practical Chemistry (Physical)	C	Nil	1	0	0	3
CSC 101	Introduction to Computer Science	C	Nil	3	2	1	0
ENG 101	Basic Engineering Drawing	R	Nil	2	1	0	3
AMS 103	Mathematics For Engineers I	R	Nil	2	2	0	0
PHY 101	Basic Principles of Physics I	C	Nil	3	2	1	0
PHY 103	Experimental Physics I	C	Nil	1	0	0	3
GES 101	Use of English I	C	Nil	2	2	0	0
GES 107	Use of Library	R	Nil	1	1	0	0
ICT 131	CompTIA A+ 1	C	Nil	1	0	0	3
			TOTAL	22			

100 LEVEL
SECOND SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	LH	TH	PH
AMS 102	General Mathematics II	C	Nil	3	2	1	0
CHM 102	General Chemistry II	C	Nil	3	2	1	0
CHM 104	Practical Chemistry (Organic/Inorganic)	C	Nil	1	0	0	3
CSC 102	Introduction to Computer Programming	C	Nil	3	2	1	0
PHY 102	Basic Principles of Physics II	C	Nil	3	2	1	0
PHY 104	Experimental Physics II	C	Nil	1	0	0	3
ENG 104	Introduction to Simulation Packages	R	Nil	2	2	0	0
AMS 104	Mathematics For Engineers II	R	Nil	2	2	0	0
GES 104	Use of English II	C		2	2	0	0
ICT 132	CompTIA A+ 2	C	ICT 131	1	0	0	3
			TOTAL	21			

200 LEVEL
FIRST SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	Contact Hrs/Wk LH	TH	PH
AMS 207	Engineering Mathematics I	C	AMS 102	3	2	1	0
ENG 201	Engineering Drawing	C	ENG 101	2	1	0	3
ENG 203	Materials Science	C	Nil	2	2	0	0
ENG 205	Applied Mechanics	C	Nil	2	2	0	0
ENG 207	Fundamentals of Thermodynamics	C	Nil	3	2	1	0
ENG 209	Applied Electricity I	C	Nil	3	2	1	0
ENG 211	Strength of Materials I	C	Nil	2	2	0	0
ENG 213	General Engineering Lab I	R	Nil	1	0	0	3
ENG 215	Electrical Workshop Practice	R	Nil	1	0	0	3
CSC 201	Computer Programming Methodology	C	CSC 101 CSC 102	3	2	0	3
ICT 215	Robotics 1	C	Nil	1	0	0	3
			Total	**23**			

200 LEVEL
SECOND SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	Contact Hrs/Wk LH	TH	PH
AMS 210	Engineering Mathematics II	C	Nil	3	2	1	0
ENG 202	Computer Aided Drafting	C	ENG 101	2	1	0	3
ENG 204	Fundamentals of Fluid Mechanics	C	Nil	3	2	1	0
ENG 206	Engineer-In-Society	C	Nil	1	1	0	0
ENG 208	Electrical Measurement & Instrumentation	C	Nil	2	2	0	0
ENG 210	Applied Electricity II	C	Nil	3	2	1	0
ENG 212	Mechanical Workshop Practice	R	Nil	1	0	0	3
ENG 214	Industrial Health & Safety	R	Nil	1	1	0	0
ENG 216	General Engineering Lab II	R	Nil	1	0	0	3
CSC 202	Object-Oriented Paradigm	R	Nil	3	2	0	3
GES 202	Peace Studies and Conflict Resolution	R	Nil	2	2	0	0
ICT 216	Robotics 2	C	ICT 215	1	0	0	3
			Total	**23**			
ENG 220	Students Work Experience Program (SWEP)	C	Nil	2	0	0	6

300 LEVEL
(FIRST SEMESTER)

Course Code	Course Title	Status	Pre-Requisites	Units	Contact Hrs/Wk		
					LH	TH	PH
ENG 301	Engineering Mathematics III	C	AMS 207	3	2	1	0
CEN 301	Software Development Techniques	C	CSC 202	2	2	0	0
CEN 303	Computer Logics	C	Nil	2	2	0	0
CEN 315	Computer Engineering Lab. I	R	Nil	1	0	0	3
EEE 305	Electronics Engineering I	C	EEE 210	2	2	0	0
EEE 307	Electric Circuit Theory	C	EEE 204	3	2	1	0
EEE 313	Basic Electrical Machines I	C	Nil	2	2	0	0
EEE 315	Electrical/Electronic Engineering Laboratory I	R	EEE 208	1	0	0	3
TCE 301	Signals and Systems Analysis	C	Nil	2	2	0	0
TCE 303	Electromagnetic Fields Theory	C	Nil	2	2	0	0
BUS 311	Introduction to Entrepreneurship Studies	R	Nil	2	2	0	0
ICT 323	Python Programming	C	Nil	1	0	0	3
			Total	**23**			

300 LEVEL
(SECOND SEMESTER)

Course Code	Course Title	Status	Pre-Requisites	Units	Contact Hrs/Wk		
					LH	TH	PH
ENG 302	Engineering Mathematics IV	C	AMS 210	3	2	1	0
CEN 304	Software Packages in Engineering	C	Nil	2	2	0	0
CEN 306	Introduction to Information & Communication Technology	R	Nil	2	2	0	0
CEN 308	Digital Electronics	C	Nil	2	2	0	0
CEN 310	Computer Graphics & Animation	C	CEN 304	2	2	0	0
CEN 316	Computer Engineering Lab. II	R	Nil	1	0	0	3
EEE 308	Electronics Engineering II	C	Nil	2	2	0	0
TCE 302	Principles of Communication Engineering	C	Nil	2	2	0	0
TCE 304	Electromagnetic Waves Theory	C	TCE 303	2	2	0	0
GES 302	Introduction to Philosophy	R	Nil	2	2	0	0

ICT 324	Python Programming FOR Machine Learning 1	C	ICT 323	1	0	0	3
	Total			**21**			
ENG 320	Students Industrial Work Experience Scheme -SIWES I	C	ENG 220	2	0	0	6

400 LEVEL
FIRST SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	Contact Hrs/Wk		
					LH	TH	PH
ENG 401	Research Methods in Engineering	R	Nil	2	1	1	0
CEN 401	Computer Organization & Architecture	C	CEN 301 CEN 302	3	2	1	0
CEN 403	Data Communication and Computer Networks	C	Nil	2	2	0	0
CEN 407	Microprocessor Architecture and Programming	C	CEN 301	2	2	0	0
CEN 409	Data Mining And Machine Learning	C	Nil	3	2	1	0
CEN 415	Computer Engineering Lab. III	R	Nil	1	0	0	3
EEE 403	Power Electronics	C	EEE 308	2	2	0	0
EEE 405	Control Systems	C	Nil	3	2	1	0
BUS 411	Entrepreneurial Skills Development Studies	C	Nil	2	2	0	0
ICT 423	Python Programming FOR Machine Learning 2 (Deep Learning)	C	ICT 324	1	0	0	3
	TOTAL UNITS			**23**			

400 LEVEL
SECOND SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	Contact Hrs /Semester		
					LH	TH	PH
ENG 402	Students' Industrial Works Experience Scheme (SIWES) II	C	ENG 320	6			

500 LEVEL
FIRST SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	Contact Hrs/Wk		
					LH	TH	PH
CEN 501	Digital System Designs	C	CEN 407	2	2	0	0
CEN 503	Computer Operating Systems	C	Nil	2	2	0	0
CEN 509	Computer Security Techniques	C	Nil	2	2	0	0
CEN 511	Software Engineering	C	Nil	2	2	0	0
CEN 513	Artificial Neural Network	C	Nil	2	2	0	0
CEN 517	Cloud Computing	C	Nil	2	2	0	0
ENG 501	Engineering Economics	R	Nil	2	2	0	0
ENG 503	Engineering Management	R	Nil	2	2	0	0
ICT 515	ISO 45001 Foundation and Lead Implementer (Occupational Health and Safety Management System)	C	Nil	1	0	0	3
	Electives (4 Units)			4	4	0	0
	Total			**21**			
	ELECTIVE COURSES						
TCE 511	Communication Systems	E	Nil	2	2	0	0
CEN 515	Prototyping Techniques	E	Nil	2	2	0	0
CEN 519	Digital Signal Processing	E	Nil	2	2	0	0
MEE 523	Operations Research	E	Nil	2	2	0	0

500 LEVEL
SECOND SEMESTER

Course Code	Course Title	Status	Pre-requisites	Units	Contact Hrs/Wk		
					LH	TH	PH
CEN 502	Internet and Web applications Technologies	C	Nil	2	2	0	0
CEN 504	Embedded Systems Design	C	Nil	2	2	0	0
CEN 506	Logic and Programming	C	Nil	2	2	0	0
CEN 514	Reliability and Maintainability of Systems	C	Nil	2	2	0	0
CEN 550	Research Project	C	Nil	6	0	0	18
ENG 502	Engineering Law	R	Nil	2	2	0	0
ICT 516	Design Thinking	C	Nil	1	0	0	3
	Electives (4 Units)			4	4	0	0
	Total			**21**			
	ELECTIVE COURSES						