

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

**100 Level Harmattan Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
CHM101	General Chemistry I	2	1	0	3	C
CHM107	Experimental Chemistry I	0	0	3	1	C
GNS101	Use of English 1	2	0	0	2	R
GNS103	Use of Library	1	0	0	1	R
MTH101	General Mathematics I	2	1	0	3	C
MEE 101	Engineering Drawing I	1	0	3	2	R
CVE 101	Engineer in Society	2	0	0	2	R
PHY 101	General Physics I	2	1	0	3	C
PHY 107	Experimental Physics I	2	0	3	1	C
	<b>Total Units</b>				<b>18</b>	

**100 Level Rain Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
CHM 102	General Chemistry II		2	1	0	3	C
CHM 108	Experimental Chemistry II		0	0	3	1	C
GNS 102	Use of English II		2	0	0	2	R
GNS 104	Nigerian People & Culture		2	0	0	2	R
MTH 102	General Mathematics II		2	1	0	3	C
MTH 104	General Mathematics III		2	1	0	3	C
MEE 102	Workshop Technology I		1	0	3	2	R
MEE 104	Engineering Drawing II	MEE 101	1	0	3	2	R
PHY 102	General Physics II		2	1	0	3	C
PHY 108	Experimental Physics II		0	0	3	1	C
	<b>Total Units</b>					<b>22</b>	

**200 Level Harmattan Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
CSC 201	Structured Programming		2	0	3	3	C
EEE 201	Applied Electricity I		2	0	0	2	C
EEE 291	Applied Electricity Lab. I		0	0	3	1	C
EEE 231	Engineering Mathematics I	MTH 101 MTH 104	2	1	0	3	C
GNS 211	Basic French		2	0	0	2	R
GNS 203	Introduction to entrepreneurial skill		2	0	0	2	R
MEE 201	Engineering Materials		2	0	0	2	C
MEE 203	Engineering Mechanics I		2	0	0	2	C
MEE 207	Basic Thermodynamics		2	1	0	3	C
STA 221	Statistics for Physical Sciences and Engineering		2	2	0	3	C
	<b>Total Units</b>					<b>23</b>	

**200 Level Rain Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
CVE 206	Strength of Materials	-	2	1	0	3	C
EEE 202	Applied Electricity II	-	2	0	0	2	C
EEE 232	Engineering Mathematics II	EEE 231	2	1	0	3	C
EEE 292	Applied Electricity Lab. II		0	0	3	1	C
GNS 212	Introduction to Information and Communication Technology	-	2	0	0	2	R
GNS 204	Logic and Philosophy		2	0	0	2	R
MEE 204	Engineering Mechanics II	MEE 203	2	0	0	2	C
MEE 206	Basic Fluid Mechanics	-	2	0	0	2	C
MEE 208	Workshop Technology II	MEE 104	1	0	3	2	C
MEE 212	Introduction to Mechanical- Engineering		2	0	0	2	C
<b>Total Units</b>						<b>21</b>	
MEE 200	SWEP I (Vacation Period)						

### 300 Level Harmattan Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
MEE 301	Mechanics of Machines I		2	0	0	2	C
MEE 303	Manufacturing Technology		1	0	3	2	C
MEE 307	Strength of Materials Lab.		0	0	3	1	C
MEE 309	Applied Thermodynamics	MEE 205	2	0	0	2	C
MEE 311	Thermodynamics Laboratory		0	0	3	1	C
MEE 313	Engineering Metallurgy		2	0	0	2	C
MEE 315	Mechanics of Machines Lab I		0	0	3	1	C
MEE 317	Machine Design I		2	1	0	3	C
EEE 315	Electrical Machine I	EEE 201				3	C
EEE 331	Engineering Mathematics III	EEE 231, EEE 232	2	1	0	3	C
	<b>Total Units</b>					<b>20</b>	

### 300 Level Rain Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
MEE 302	Mechanics of Machine II	MEE 301	2	0	0	2	C
MEE 304	Mechanical measurement and instrumentation		2	0	0	2	C
MEE 306	Computer Aided Design and Manufacturing		1	0	3	3	C
MEE 318	Fluid Mechanics	MEE 206	2	1	0	3	C
MEE 310	Fluid Mechanics lab		0	0	3	1	C
MEE 312	Machine Drawing	MEE 102	1	0	3	2	C
MEE 314	Mechanical Maintenance & Repairs		2	0	0	2	C
MEE 316	Mechanics of Machines Lab II		0	0	3	1	C
EEE 314	Electrical Machine II		1	1	3	3	C
EEE 332	Engineering Mathematics IV	EEE 331	2	1	0	3	C
	<b>Total Units</b>					<b>22</b>	

MEE 300 SWEP II (Vacation Period)

**400 Level Harmattan Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
MEE403	Automatic Control Systems	MEE304	2	0	3	3	C
MEE405	Applied Fluid Mechanics	MEE308	2	0	3	3	C
MEE407	Heat and Mass Transfer		2	0	3	3	C
MEE411	Refrigeration and Air conditioning I		2	0	0	2	C
MEE413	Machine Design II	MEE305	2	1	0	3	C
MEE415	Mechanics of Metal Forming	MEE313	2	0	3	3	C
CVE 401	Technical Report Writing		2	0	0	2	C
	<b>Total Units</b>					<b>19</b>	

**400 Level Rain Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
MEE 200	SWEP I					2	C
MEE 300	SWEP II					2	C
MEE 400	Student (Supervised) Industrial Work Experienced Scheme (SIWES)	MEE 300	0	0	8	6	C
	<b>Total Units</b>					<b>10</b>	

**500 Level Harmattan Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
MEE501	Internal Combustion Engines	MEE309	1	1	0	2	C
MEE503	Fluid Machinery	MEE405	1	1	0	2	C
MEE505	Industrial Engineering		2	0	0	2	C
MEE507	Fundamentals of Tribology		1	0	0	1	C
MEE509	Assigned Project		2	0	3	3	C
CVE 511	Industrial Economics		2	0	0	2	C
CVE513	Industrial Law and Management		2	0	0	2	C
	<b>CHOOSE TWO (2) ELECTIVES</b>						
MEE511	Energy Technology		2	0	3	3	E
MEE513	Refrigeration & Air-conditioning II	MEE411	2	0	3	3	E
MEE515	Mineral Processing & Extractive Metallurgy		2	0	3	3	E
CVE519	Environmental Pollution		3	0	0	3	E
CVE521	Advanced Structural Analysis		3	0	0	3	E
EEE 521	Introduction to Modern Control		3	0	0	3	E
	<b>Total Units</b>					<b>20</b>	

**500 Level Rain Semester**

<b>Course Code</b>	<b>Course Title</b>	<b>Pre-Req.</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Units</b>	<b>Status</b>
MEE502	Advanced Heat Transfer		2	0	0	2	C
MEE504	Automobile Engineering		2	0	3	3	C
MEE506	Production Engineering		2	0	3	3	C
MEE508	Engineering Systems Analysis		2	0	0	2	C
MEE510	Assigned Project		2	0	3	3	C
	<b>CHOOSE TWO (2) ELECTIVES</b>						
MEE512	Power Plant Generation		2	0	3	3	E
MEE514	Fluid Power Engineering		2	0	3	3	E
MEE516	Advanced Strength of Materials	MEE305	2	0	3	3	E
CVE512	Traffic and Highway Engineering		3	0	0	3	E
EEE 524	Modelling and Simulation of Dynamic Systems		3	0	0	3	E
	<b>Total Units</b>					<b>19</b>	

## CCMAS CURRICULUM FOR MECHANICAL ENGINEERING

### B.Eng. Mechanical 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
MEE 101	Introduction to Mechanical Engineering	2	C	30	0
STA 111	Descriptive Statistics	3	C	45	0
	<b>TOTAL</b>	<b>23</b>			

#### 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
		<b>19</b>			