

# PURE PHYSICS

100 LEVEL FIRST SEMESTER CURRENT CURRICULUM						
Code	Title	L	T	P	CU	Prerequisites
PHY 183	Introductory Mechanics & Properties of Matter	2	1	0	3	
PHY184	Intro. Heat, Wave motion & Sound	2	1	0	3	
PHY171	Basic Experimental physics I	0	0	3	1	
MTH111	Elementary Algebra I	2	1	0	3	
MTH 112	Calculus I	2	1	0	3	
MTH113	Geometry	2	1	0	3	
CHM101	Foundation Chemistry	2	1	3	4	
GNS101	Use of English I	2	0	0	2	
<b>TOTAL = 22</b>						

100 LEVEL SECOND SEMESTER CUURENT CURRICULUM						
Code	Title	L	T	P	CU	Prerequisites
PHY188	Intro. Electricity & Magn.	2	1	0	3	
PHY189	Intro. Optics & Modern Phy.	2	1	0	3	
PHY172	Basic Experimental Physics II	0	0	3	1	
MTH121	Elementary Algebra II	2	1	0	3	
MTH122	Calculus II	2	1	0	3	
MTH123	Elementary Theory of sets	2	1	0	3	
CHM102	Foundation Chemistry	2	1		4	
GNS102	Use of English II	2	0	0	2	
<b>TOTAL 22</b>						



<b>200 LEVEL FIRST SEMESTER CURRENT CURRICULUM</b>						
Code	Title	L	T	P	CU	Prerequisites
PHY202	Intermediate Mechanics	3	1	0	4	PHY183
PHY222	Heat and Thermodynamics	2	1	0	3	PHY184
PHY271	Basic Experimental Physics III	0	0	3	1	-
MTH211	Linear Algebra I	2	1	0	3	MTH121
MHT212	Mathematical Methods I	2	1	0	3	MTH122
CS232	Intro. to Computer Science I	2	1	0	3	-
GNS201	Information Science	2	0	0	2	-
GNS101	Use of English I	2	0	0	2	-
MTH213	ANALYSIS I	2	1	0	3	-
ME 214	Workshop Practice I	0	0	3	1	-
<b>TOTAL =23/25</b>		<b>*GNS 101 for DE only</b>				

<b>200 LEVEL SECOND SEMESTER CURRENT CURRICULUM</b>						
Code	Title	L	T	P	CU	Prerequisites
PHY212	Interactions, Fields and waves	3	1	0	4	PHY188
PHY242	Atomic Physics I	2	1	0	3	PHY189
PHY 272	Basic Experimental Physics IV	0	0	3	1	-
MTH221	Linear Algebra II	2	1	0	3	MTH121
MTH223	Analysis II	2	1	0	3	MTH123
CS 242	Intro. Computer Science II	2	1	0	3	-
GNS 202	Nigerian History & Culture	2	0	0	2	-
GNS 222	Peace and Conflict Resolution Studies	2	0	0	2	-
GNS 102	Use of English II	2	0	0	2	-
PHY 281	Mathematical Methods of Physics I	2	1	0	3	MTH 212
<b>TOTAL = 24/</b>		<b>*GNS 102 for DE only</b>				

<b>300 LEVEL FIRST SEMESTER CURRENT CURRICULUM</b>						
Code	Title	L	T	P	CU	Prerequisites
PHY303	Analytical Mechanics	2	1	0	3	PHY202, MTH222
PHY342	Atomic physics II	2	1	0	3	PHY242
PHY371	Experimental physics I	0	0	6	2	-
PHY352	Electronics I	2	1	0	3	-
MTH 312	Analysis III	2	1	0	3	MTH 223
ME 214	Workshop Practice	0	0	3	1	
GNS 301	Science, Technology and society	2	1	0	3	-
<b>TOTAL = 18</b>						

<b>300 LEVEL SECOND SEMESTER CURRENT CURRICULUM</b>						
Code	Title	L	T	P	CU	Prerequisites
PHY333	Quantum Mechanics I	2	1	0	3	PHY342/PHY303/MTH222
PHY355	Solid state physics I	2	1	0	3	PHY342
PHY372	Experimental physics II	0	0	6	2	-
PHY 382	Mathematical Methods of Physics II	2	1	0	3	MTH 222
PHY 362	Nuclear and Particle Physics	2	1	0	3	PHY 342
PHY 386	Energy Source and Energy Conversion	2	0	0	2	-
MTH323	Complex analysis I	2	1	0	3	-
GNS 302	Business Growth and Creation	2	0	0	2	-

**TOTAL = 21**

**400 LEVEL IT FIRST AND SECOND SEMESTER 8 UNITS**

<b>500 LEVEL FIRST SEMESTER CURRENT CURRICULUM</b>						
Code	Title	L	T	P	CU	Prerequisites
PHY599	Research Project		0	0	0	-
PHY533	Quantum Mechanics II	2	1	0	3	PHY333
PHY514	Classical Electrodynamics	2	1	0	3	PHY212
PHY522	Statistical Physics	3	1	0	4	PHY222,PHY342
PHY571	Advanced Exptl. Physics I	0	0	9	3	-
MTH337	Numerical Analysis I	2	1	0	3	MTH211
<b>TOTAL= 16</b>						

<b>500 LEVEL SECOND SEMESTER CURRENT CURRICULUM</b>						
Code	Title	L	T	P	Units	Prerequisites
PHY599	Research Project	0		0	6	-
PHY554	Electronics II	3	1	0	4	PHY352
ME307	Workshop Practice II	0	0	3	1	
PHY572	Advance Experimental Phy. II	0	0	9	3	
PHY551	Nuclear & Part. Physics II	3	1	0	4	PHY362
PHY561	Solid State Physics II	2	1	0	3	PHY355
<b>TOTAL = 23/24</b>						

**One Elective may be chosen**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CU</b>	<b>PRE-REQUISITE(S)</b>
ME551	Energy Studies	1	1	0	2	
MTH522	Partial Differential Equations	2	1	0	3	PHY382/MTH348
GPH221	Physics of the Solid Earth	2	1	0	3	

