

**LEVEL I (100 Level )****First Semester**

<b>Course Code</b>	<b>Title</b>	<b>Credits</b>	<b>Course Status</b>	<b>Pre-requisite</b>
PHY 131	Mechanics, Thermal Physics and Waves	3	Core	O'L
PHY 117	Basic Experimental Physics I	1	Core	O'L
MTH 121	Elementary Set Theory & Algebra	2	Core	O'L
MTH 113	Trigonometry	1	Core	O'L
MTH 115	Coordinate Geometry	1	Core	O'L
CHM 121	Foundation Chemistry I	2	Core	O'L
CHM 123	Foundation Chemistry III	2	Core	O'L
CHM 111	Practical Chemistry I	1	Core	O'L
GSP121	Communication in English I	2	Core	O'L
<b>Total</b>		<b>15</b>		

**Second Semester**

<b>Course Code</b>	<b>Title</b>	<b>Credits</b>	<b>Course Status</b>	<b>Pre-requisite</b>
PHY 132	Electricity, Magnetism & Modern Physics	3	Core	O'L
PHY 118	Basic Experimental Physics II	1	Core	O'L
MTH 132	Differential Calculus & Applications	3	Core	O'L
MTH 134	Vectors and Conics	3	Core	O'L
STA122	Probability I	2	Core	O'L
CSC 122	Introduction to Computer Science	2	Core	O'L
CHM 122	Foundation Chemistry II	2	Core	O'L
CHM 112	Practical Chemistry II	1	Core	O'L
GSP 122	Information and Communication Technology	2	Core	
GSP124	Use of Library and Study Skills	2	Core	
<b>Total</b>		<b>21 Units</b>		

**TOTAL CREDIT UNITS FOR 100 LEVEL = 15 + 21 = 36 units**

**LEVEL II (200 Level)****First Semester**

Course Code	Title	Credits	Course Status	Pre-requisite
PHY233	Thermal Physics	3	Core	PHY131
PHY225	Introduction to Space Science	2	Core	
PHY 217	Experimental Physics I	1	Core	
PHY221	Energy and Environment	2	Core	
MTH 231	Mathematical Methods I	3	Core	MTH 132
MTH 235	Elementary Differential Equations I	3	Core	MTH 132
CSC 233	Computer Programming	3	Core	CSC 122
STA 221	Statistics for Physical Science	2	Core	
GSP223	Peace and Conflict Resolution Studies	2	Core	
GSP221	Introduction to Entrepreneurship	2	Core	
GSP121 (For D.E. only)	Communication in English I	2	Core	
<b>Total</b>		<b>23 Units 25 Units for D.E.</b>		

**Second Semester**

Course Code	Title	Credits	Course Status	Pre-requisite
PHY232	Electric Circuits and Electronics	3	Core	PHY132
PH 234	Waves and Optics	3	Core	PHY131
PHY236	Elementary Modern Physics	3	Core	PHY132
PHY218	Experimental Physics II	1	Core	
PHY238	Physics of the Solid Earth	3	Core	
GSP 224	Communication in English II	2	Core	
GSP228	Nigeria People and Culture	2	Core	
GSP 124(D.E. ONLY)	Use of Library and Study Skills	2	Core	
<b>Total</b>		<b>17 Units / 19 Units for D.E.</b>		

**ELECTIVES**

Physics students should choose ONE (1) course from the following courses:

Course Code	Title	Credit Units	Course Status	Pre-requisite
MTH 236	Introduction to Numerical Analysis	3	Elective	
STA 222	Probability	2	Elective	
CSC 220	Programming in Basic	2	Elective	

**TOTAL CREDIT UNITS FOR 200 LEVEL: 23 + 17 + 2 = 42 / 25 + 19 + 2 = 46 for D.E.**

**LEVEL III (300 Level)****First Semester**

Courses	Title	Credit Units	Course Status	Pre-requisite
PHY331	Analytical Mechanics I	3	Core	PHY131
PHY333	Statistical and Thermal Physics	3	Core	PHY233
PHY317	Experimental Physics III	1	Core	
PHY329	Solid State Physics I	2	Core	
PHY321	Electronics I	2	Core	PHY232
PHY335	Quantum Physics	3	Core	
PHY337	Mathematical Physics I	3	Core	MTH231
PHY 339	Electromagnetism	3	Core	
MTH 361	Complex Analysis I	3	Core	MTH 232 or MTH231
GSP 321	Practical Entrepreneurship	2	Core	
<b>TOTAL</b>		<b>25 Units</b>		

### Second Semester

Course Code	Title	Credits	Course Status	Pre-requisite
PHY 368	SIWES	6	Core	

**TOTAL CREDIT UNITS FOR 300 LEVEL = 25 + 6 = 31 Units**

### LEVEL IV (400 Level)

#### First Semester

Course Code	Title	Credit Units	Course Status	Pre-requisite
PHY 421	Electronics II	2	Core	PHY 321
PHY 423	Solid State Physics II	2	Core	PHY 329
PHY 425	Workshop Practice	2	Core	
PHY 431	Analytical Mechanics II	3	Core	PHY 331
PHY 439	Mathematical Physics I	3	Core	PHY 337
PHY 435	Quantum Mechanics I	3	Core	PHY 335
PHY 433	Electromagnetic waves and Optics	3	<b>Core</b>	PHY 339
<b>TOTAL</b>		<b>18 Units</b>		

#### ELECTIVE COURSES

Students should choose ONE (1) course from the following courses:

Course Code	Title	Credit Units	Course Status	Pre-requisite
PHY 427	Medical Physics I	2	Elective	
PHY 429	Industrial Geophysics	2	Elective	
PHY 437	Nuclear and Particle Physics I	3	Elective	

#### Second Semester

Course Code	Title	Credit	Course	Pre-requisite
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		<b>Units</b>	<b>Status</b>	
PHY432	Computational Physics	3	Core	
PHY436	Atomic and Molecular Spectroscopy	3	Core	PHY 335
PHY434	Quantum Mechanics II	3	Core	PHY435
PHY462	Supervised Independent Project	6	Core	
	<b>TOTAL</b>	<b>15</b>		
		<b>Units</b>		

### ELECTIVE COURSES

Students should choose ONE (1) course from the following courses:

Course Code	Title	Credit Units	Course Status	Pre-requisite
PHY 424	Atmospheric Physics	2	Elective	
PHY 422	Biophysics	2	Elective	
PHY 438	Nuclear and Particle Physics II	3	Elective	PHY437

**TOTAL CREDIT UNITS FOR 400 LEVEL = 18 + 2 + 15 + 2 = 37 Units**

**Total Credits Units of Core Courses = 36 + 42 + 31 + 37 = 146 Units.**  
**= 46 + 31 + 37 = 114 Units for D.E.**

### 4.5.2 SUMMARY

LEVEL	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	TOTAL
<b>100</b>	<b>15</b>	<b>21</b>	<b>36</b>
<b>200</b>	<b>23</b>	<b>19</b>	<b>42</b>
<b>300</b>	<b>25</b>	<b>6</b>	<b>31</b>
<b>400</b>	<b>20</b>	<b>17</b>	<b>37</b>
<b>MINIMUM FOR GRADUATION</b>			<b>146</b>

### DIRECT ENTRY

LEVEL	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	TOTAL
<b>200</b>	<b>25</b>	<b>21</b>	<b>46</b>
<b>300</b>	<b>25</b>	<b>6</b>	<b>31</b>
<b>400</b>	<b>20</b>	<b>17</b>	<b>37</b>
<b>MINIMUM FOR GRADUATION</b>			<b>114</b>

**N.B:** In order to graduate, a student needs to earn **146** credit units of core courses.

For direct entry, a student needs to earn **114** credit units of core courses.

<b>S/No</b>	<b>NAME</b>	<b>RANK</b>	<b>AREA OF SPECIALIZATION</b>	<b>EMPLOYMENT STATUS</b>
1.	Prof. Lawan Sani Taura	Professor	Solid State	Permanent
2.	Prof. Yahya Ibrahim Yola	Professor	Quantum Theory/Nuclear Physics	Visiting
3.	Prof. Chifu E. Ndikilar	Professor	Relativity	Visiting
4.	Dr Faruk Nasir	Senior Lecturer	Communication Physics	Sabbatical
5.	Dr Seydou Hankurou		Experimental Nuclear Physics	Visiting
6.	Dr Idris Dauda Adamu		Theoretical Physics	Visiting
7.	Dr Hassan Usman Jamo		Material Science	Visiting
8.	Dr Abdussalam Balarabe Suleiman		Theoretical Physics	Visiting
9.	Dr Abdullahi Lawan		Material Science	Visiting
10.	Dr Inuwa Aliyu Faragai		Material Science	Visiting
11.	Dr Shuaibu Uba		Atmospheric Physics	Visiting
12.	Dr Abdulkadir S. Gidado		Solid State Physics	Visiting
13.	Dr Yahaya A. Sumaila		Electronics	Visiting
14.	Dr Abdulkadir M. Nura		Plasma Physics	Visiting
15.	Dr Mohammad L. Madugu			Visiting
16.	Idris M. Chiromawa		Nuclear Physics	Permanent
17.	Suleiman Bashir Adamu		Quantum Theory	Permanent
18.	Ibrahim Garba Shitu		Geophysics	Permanent
19.	Aminu Muhammad		Optics	Permanent
20.	Abdullahi Mikailu		Geophysics	Permanent
21.	Lawan Musa Yalwa		Electronics	Permanent
22.	Abdulhamid A. Magama		Geophysics	Permanent
23.	Musbahu Jafar Yusuf		Theoretical Physics	Permanent
24.	Aliyu Yahaya		Experimental Physics	Permanent
25.				
26.				
27.				

28.				
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- [Research](#)
- Research Focus
- [Publications](#)
- List of publications
- [Student Hand Book](#)
- **Courseware**
- **List all the course titles and provide the course ware for uploads**

**Some Photos here of labs and students**