

The Course Structure of the M. Sc. (Physics) Program to be implemented from June 15, 2010 is as follows:

Semester I	Course	No. of hrs/wk	Credits	Marks
	Core Theory Courses - 1 - 4	(Theory 03 Tutorial & Assignment 16 -01)	16	400
	Practical Course - 1	12	06	150
	Foundation Course - 1	02	02	050
	Total	<b>30</b>	<b>24</b>	<b>600</b>

Semester II	Course	No. of hrs/wk	Credits	Marks
	Core Theory Courses - 5 - 8	16	16	400
	Practical Course - 2	12	06	150
	Foundation Course - 2	02	02	050
	Total	<b>30</b>	<b>24</b>	<b>600</b>

Semester III	Course	No. of hrs/wk	Credits	Marks
	Core Theory Course - 9	04	04	100
	Elective Courses 1 - 2	08	08	200
	Interdisciplinary Course - 1	04	04	100
	Practical Course - 3	12	06	200
	Project Practical	04	02	--
	Total	<b>32</b>	<b>24</b>	<b>600</b>

Semester IV	Course	No. of hrs/wk	Credits	Marks
	Core Theory Course 10	04	04	100
	Elective Courses 3 - 4	08	08	200
	Interdisciplinary Course - 2	04	04	100
	Practical Course - 4	12	06	100
	Project Dissertation	04	02	100
	Total	<b>32</b>	<b>24</b>	<b>600</b>
	<b>Total</b>		<b>96</b>	<b>2400</b>

**Titles of Core Theory Courses 1 - 10**

- CT1 Mathematical Physics and Classical Mechanics  
 CT2 Solid State Electronic Devices and Circuits  
 CT3 Quantum Mechanics - 1  
 CT4 Electrodynamics and Plasma Physics  
 CT5 Quantum Mechanics - 2 and Statistical Mechanics  
 CT6 Atomic and Molecular Physics  
 CT7 Space Physics  
 CT8 Solid State Physics  
 CT9 Nuclear and Particle Physics  
 CT10 Numerical Analysis and Computer Programming

**Titles of Elective Theory Courses 1 - 12 (Students Have to Select Any Four)**

- ET1 Synthesis of Materials  
 ET2 Properties of Materials  
 ET3 Functional Materials  
 ET4 Physics of Ionosphere - Magnetosphere System and Radio Wave Propagation  
 ET5 Remote Sensing and its Applications  
 ET6 Experimental Techniques in Space Research  
 ET7 Analog and Digital Systems  
 ET8 Microwave Electronics  
 ET9 Electronic Communication  
 ET10 Nuclear Radiation Detectors and Accelerators  
 ET11 Neutron Physics and Nuclear Reactor Theory  
 ET12 Nuclear Reactions, Nuclear Energy and Nuclear Models

**Titles of Interdisciplinary Courses Offered by Physics Department**

No.	Title	Course in Charge	User Departments
1	Electronic Gadgets and Appliances	Prof. H.H. Joshi	All Departments
2	Physics and Chemistry of Nanomaterials	Prof. D.G. Kuberkar	All Science Departments
3	Experimental Techniques with Interdisciplinary Applications	Dr. G.J. Baldha	All Science Departments
4	Treatment of Experimental Data	Dr. H.P. Joshi	All Departments

**Titles of Skill Development in Physics Papers (one each semester)**

1. Foundation Course in Physics - 1      Computer and Laboratory Fundamentals
2. Foundation Course in Physics - 2      Theory of Errors