

## Courses Offered:

- **5 Years (10 Semester) Integrated UG/PG Program in Physics & Electronics**
- **2 Years (4 Semester) Course**
- **M. Sc. Physics (Specialization in Material Science)**  
**In addition to the presently offered specialization, new specializations, Nuclear Physics and Laser Science will be offered from coming sessions**
- **M. Sc. Electronics (Specialization in Communication Electronics)**
- **Integrated M. Phil. / Ph. D.**

## Fee Structure

	<b>At the time of admission</b>	<b>II Semester</b>	<b>III Semester</b>	<b>IV Semester</b>	<b>V Semester</b>	<b>VI Semester</b>
<b>Integrated UG/PG Prog.</b>	<b>Rs. 3000/- per semester</b>					
<b>M.Sc. (Physics)</b>	<b>Rs. 3200/-</b>	<b>Rs. 2200/-</b>	<b>Rs. 2775/-</b>	<b>Rs. 2400/-</b>		
<b>M.Sc. (Electronics)</b>	<b>Rs. 6750/-</b>	<b>Rs. 5350/-</b>	<b>Rs. 5660/-</b>	<b>Rs. 7350/-</b>		
<b>Int. M.Phil. / Ph.D.(Physics)</b>	<b>Rs. 8,550/-</b>	<b>Rs. 8,550/-</b>				
<b>Ph.D. (Direct)</b>	<b>Rs. 9,350/-</b>					

For self finance seats, Registration fee of Rs. 30,000/- is to be paid at the time of admission over and above the prescribed semester fees.

Examination and other university fees shall be charged separately as per notification as issued from time to time.

<b>Course Structure of 5 Years Integrated UG Program in Physics</b>							
<b>Semester I</b>				<b>Semester II</b>			
Paper	Code	Paper Name	Marks	Paper	Code	Paper Name	Marks
I	BP-101	Mechanics and properties of matter	50	IV	BP-201	Kinematics and Oscillations	50
II	BP-102	Electrostatics and Magnetostatics	50	V	BP-202	Electromagnetic theory	50
III	BP-103	Lab I	50	VI	BP-203	Lab II	50
<b>Semester III</b>				<b>Semester IV</b>			
VII	BP-301	Heat and Thermodynamics	50	X	BP-401	Optics	50
VIII	BP-302	Basic Electronics	50	XI	BP-402	Modern Physics	50
IX	BP-303	Lab III	50	XII	BP-403	Lab IV	50
<b>Semester V</b>				<b>Semester VI</b>			
XIII	BP-501	Optical instruments and techniques	50	XIX	BP-601	Atomic and Molecular Physics	50
XIV	BP-502	Mathematical Physics	50	XX	BP-602	Basic Nuclear Physics	50
XV	BP-503	Basic Quantum mechanics	50	XXI	BP-603	Solid State Physics II	50
XVI	BP-504	Solid State Physics I	50	XXII	BP-604	Elements of Nanoscience	50
XVII	BP-505	Lab V	50	XXIII	BP-605	Lab VII	50
XVIII	BP-506	Lab VI	50	XXIV	BP-606	Project work	150

<b>Course Structure of 5 Years Integrated UG Program in Electronics</b>							
<b>Semester I</b>				<b>Semester II</b>			
Paper	Code	Paper Name	Marks	Paper	Code	Paper Name	Marks
I	BE-101	Network Theorems and A.C. Circuits	50	IV	BE-201	Digital Electronics I	50
II	BE-102	Basic Electronics I	50	V	BE-202	Basic Electronics II	50
III	BE-103	Lab I	50	VI	BE-203	Lab II	50
<b>Semester III</b>				<b>Semester IV</b>			
VII	BE-301	Digital Electronics II	50	X	BE-401	Electromagnetic Theory	50
VIII	BE-302	Basic Electronics III	50	XI	BE-402	Numerical techniques	50
IX	BE-303	Lab III	50	XII	BE-403	Lab IV	50
<b>Semester V</b>				<b>Semester VI</b>			
XIII	BE-501	Microprocessor and microcontrollers	50	XIX	BE-601	Analog Communication II	50
XIV	BE-502	Wave Propagation	50	XX	BE-602	Digital Communications	50
XV	BE-503	Electronic Instrumentation and Digital Signal Processing	50	XXI	BE-603	Advance Electronic Instrumentation	50

XVI	BE-504	Analog Communication I	50	XXII	BE-604	Fibre Optics and Optoelectronics	50
XVII	BE-505	Lab V	50	XXIII	BE-605	LabVII	50
XVIII	BE-506	Lab VI	50	XXIV	BE-606	Project Work	150

<b>Course Structure (M. Sc. PHYSICS)</b>		
Semester I		
Code	Subject	Marks
PT-101	Mathematical Physics	100
PT-102	Classical Mechanics	100
PT-103	Quantum Mechanics	100
PT-104	Basics of Electronic Devices	100
PT-105	Lab. Course :	200
Semester II		
PT-201	Quantum Mechanics-II	100
PT-202	Statistical Mechanics	100
PT-203	Electrodynamics & Plasma Physics	100
PT-204	Atomic & Molecular Physics	100
PT-205	Lab. Course:	200
Semester III		
PT-301	Computer programming and Numerical Analysis	100
PT-302	Condensed Matter Physics-I	100
PT-303	Nuclear & Particle Physics	100
PT-304	Materials Science – I	100
PT-305	Laboratory	200
Semester IV		
PT-401	Laser Physics and Spectroscopy	100
PT-402	Condensed Matter Physics –II	100
PT-403	Material Science –II	100
PT-404	Physics of Semiconductor devices	100
PT-405	Project Work	200

<b>Course Structure of M. Sc. Electronics</b>			
<b>First Semester</b>	<b>CODE</b>	<b>SUBJECT</b>	<b>MARKS</b>
Paper-I	El-101	Electronic Materials	100
Paper-II	El-102	Electrodynamics	100
Paper-III	El-103	Integrated Devices And Circuits	100
Paper-IV	El-104	Digital Electronics	100
Paper-V	El-105	Basic Electronic Laboratory	100
Paper-VI	El-106	Minor Project Work	100
<b>Second Semester</b>			
Paper-I	El-201	Signals And System	100
Paper-II	El-202	Electronic Communication Methods & Radar	100
Paper-III	El-203	Semiconductor Devices & Fabrication	100
Paper-IV	El-204	Computer Application In Electronics	100
Paper-V	El-205	Digital & Communication Electronic Laboratory	100
Paper-VI	El-206	Minor Project Work	100
<b>Third Semester</b>			
Paper-I	El-301	Communication Electronics	100
Paper-II	El-302	Fiber Optic's & Optical Comm.	100
Paper-III	El-303	Digital Communication & Networking	100
Paper-IV	El-304	Sensor And Transducers	100
<b>Fourth Semester</b>			
Paper-I	El-401	Major Project Work With Dissertation	100
Paper-II	El-402	Practical Training In Any Of The Following Fields	100

## **Integrated M.Phil / Pre-Ph.D. program in Physics**

The following examination scheme, marking and evaluation pattern is approved for M. Phil program (exit option) in the integrated M.Phil /Pre-Ph.D. program in Physics

Semester -I	Name of the Paper	Marks in end semester examination	Internal Assessment Marks	Total
	<b>Characterization Techniques of Materials</b>	60	40	100
	<b>Physics of Advance materials</b>	60	40	100
	<b>Research Methodology and Scientific Presentation</b>	60	40	100
			Total	300