Department of Physics

Details of Departmental Compulsary (DC) Courses

S. No.	Course Code	Course Name	L-T-P	Credit	Course Type
		Departmental Compulsary (DC) Courses			
1	NPHC501	Classical Mechanics and Special Theory of Relativity	3-1-0	4	Theory
2	NPHC502	Methods of Mathematical Physics	3-1-0	4	Theory
3	NPHC503	Quantum Mechanics-I	3-1-0	4	Theory
4	NPHC504	Electronics	3-0-0	3	Theory
5	NPHC505	Numerical Methods and Computer Programming	3-1-0	3	Theory
6	NPHC506	Experimental Physics I	0-0-3	1.5	Practical
7	NPHC507	Experimental Physics II	0-0-3	1.5	Practical
8	NPHC508	Quantum Mechanics-II	3-1-0	4	Theory
9	NPHC509	Electrodynamics and Radiation theory	3-1-0	4	Theory
10	NPHC510	Nuclear and Particle Physics	3-0-0	3	Theory
11	NPHC511	Condensed Matter Physics	3-0-0	3	Theory
12	NPHC512	Experimental Physics III	0-0-3	1.5	Practical
13	NPHC513	Experimental Physics IV	0-0-3	1.5	Practical
14	NPHC514	Statistical Mechanics	3-1-0	4	Theory
15	NPHC515	Atomic and Molecular Physics	3-1-0	4	Theory
16	NPHC516	Experimental Physics V	0-0-3	1.5	Practical
17	NPHC517	Experimental Physics VI	0-0-3	1.5	Practical
18	NPHC595	Research Methodology	3-0-0	3	Theory
19	NPHC596	Research Methodology	3-0-0	3	Audit
20	NPHC598	Thesis	0-0-0	20	Non-contact
21	NPHC599	Thesis	0-0-0	20	Audit

Details of Departmental Elective (DE) Courses

S. No.	Course Code	Course Name	L-T-P	Credit	Course Type
		Departmental Elective Courses			
1	NPHD501	Quantum Field Theory	3-0-0	3	Theory
2	NPHD502	Computational Physics	3-0-0	3	Theory
3	NPHD503	Nonlinear Optics	3-0-0	3	Theory
4	NPHD504	Biophysics	3-0-0	3	Theory
5	NPHD505	High Energy Physics	3-0-0	3	Theory
6	NPHD506	Laser Physics and Technology	3-0-0	3	Theory
7	NPHD507	Optics and Optical Instrumentation	3-0-0	3	Theory
8	NPHD508	Advanced Condensed Matter Physics	3-0-0	3	Theory
9	NPHD509	Advanced Mathematical Methods in Physics	3-0-0	3	Theory
10	NPHD510	Quantum Computation and Information	3-0-0	3	Theory
11	NPHD511	Plasma Physics: Fundamentals and Applications	3-0-0	3	Theory
12	NPHD512	Ultrafast Optical Science and Technology	3-0-0	3	Theory

13	NPHD513	Semiconductor Physics & Technology	3-0-0	3	Theory
14	NPHD514	Physics of Nanomaterials	3-0-0	3	Theory
15	NPHD515	Fibre Optics and Applications	3-0-0	3	Theory
16	NPHD516	Theory of Relativity	3-0-0	3	Theory
17	NPHD517	Astrophysics and Cosmology	3-0-0	3	Theory
18	NPHD518	Nuclear Astrophysics	3-0-0	3	Theory
19	NPHD519	Advanced Statistical Mechanics	3-0-0	3	Theory
20	NPHD520	Quantum Many Body Physics	3-0-0	3	Theory
21	NPHD521	Optoelectronics Materials and Devices	3-0-0	3	Theory
22	NPHD522	Thin Film and Vacuum Technology	3-0-0	3	Theory
23	NPHD523	Characterization Techniques	3-0-0	3	Theory
24	NPHD524	Theoretical Physics	3-0-0	3	Theory
25	NPHD525	Experimental Physics	3-0-0	3	Theory