

Model Plan Semester-wise: As per the new Curriculum

Semester I				
Course code	Course Name	L-T-P	C	Prerequisites
PH 401	Mathematical Physics-I	3-1-0	4	None
PH 402	Classical Mechanics	3-1-0	4	None
PH 403	Quantum Mechanics-I	3-1-0	4	None
PH 404	Basic Analog and Digital Electronics	3-0-0	3	None
PH 421	Computational Programming	1-0-2	2	None
PH 481	Physics Laboratory-I	0-0-6	3	None
Semester II				
PH 405	Mathematical Physics-II	3-1-0	4	None
PH 406	Quantum Mechanics-II	3-1-0	4	None
PH 407	Electromagnetic Theory	3-1-0	4	None
PH 408	Condensed Matter Physics	3-1-0	4	None
PH 409	Experimental Techniques in Physics	3-0-0	3	None
PH 482	Physics Laboratory-II	0-0-6	3	None
PH 461	Comprehensive Viva Voce	0-0-0	2	None
Semester III				
PH 501	Atomic and Molecular Physics	3-1-0	4	None
PH 502	Applied Optics	3-0-0	3	None
PH 503	Statistical Mechanics	3-1-0	4	None
PH 581	Physics Laboratory-III	0-0-6	3	None
----	Elective-I	3-0-0	3	None
----	Elective-II	0-0-6	3	None
PH571	Project-I	0-0-4	2	None
Semester IV				
PH 504	Nuclear Physics	3-0-0	3	None
----	Elective-III	3-0-0	3	None
----	Elective-IV	3-0-0	3	None
PH 572	Project (Projects will be assigned at the beginning of Semester III.)	0-0-20	10	None

Electives	Course Code	Course Name	L-T-P	C	Prerequisites
Elective-I	PH 531	Measurement Techniques and Cryogenics	3-0-0	3	None
	PH 532	Numerical Methods & Computational Physics	3-0-0	3	None
Elective-II	PH 533	Non Destructive Testing Lab	0-0-6	3	PH 531
	PH 534	Computational lab	0-0-6	3	PH 532
Elective-III	PH 541	Science and Technology of Thin Films	3-0-0	3	PH 408/PH 503
	PH 542	Nanoscience and Technology	3-0-0	3	PH 403/PH 405
	PH 543	Physics of Liquid Crystals	3-0-0	3	None
	PH 544	Advanced Condensed Matter Physics	3-0-0	3	PH 408
Elective-IV	PH 551	Light-Matter Interaction	3-0-0	3	PH 502
	PH 552	Spintronics	3-0-0	3	PH 503/PH 501
	PH 553	Biological Physics	3-0-0	3	None
	PH 554	Phase Transformation	3-0-0	3	None