

Model Semester wise Distribution of Courses

Semester I					
Course code	Course name	L-T-P	C	Prerequisites	
PH 401	Mathematical Physics	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 405	Physics of Electronic Devices	3-0-0	3	None	
PH 481	Physics Laboratory I	0-0-6	3	None	
PH 421	Computational Programming	1-0-2	2	None	
Semester II					
PH 404	Quantum Mechanics II	3-1-0	4	None	
PH 406	Electromagnetic Theory	3-1-0	4	None	
PH 407	Statistical Mechanics	3-1-0	4	None	
PH 408	Condensed Matter Physics I	3-1-0	4	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	Condensed Matter Physics II	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	
PH 571	Project I	0-0-4	2	None	
Semester IV					
PH 504	Nuclear Physics	3-0-0	3	None	
-----	Elective III	4-0-0	4	None	
-----	Elective IV	4-0-0	4	None	
PH 572	Project (Projects will be assigned at the beginning of Semester III.)	0-0-20	10	None	
Elective I (3 credits)	PH 531	Measurement techniques and Cryogenics	3-0-0	3	None
	PH 532	Numerical methods & Computational Physics	3-0-0	3	None
Elective II (3 credits)	PH 533	Non-destructive testing lab	0-0-3	3	PH 531
	PH 534	Computational lab	0-0-3	3	PH 532
Elective III (4 credits)	PH 535	Spectroscopy	4-0-0	4	None
	PH 536	Physics of thin films	4-0-0	4	None
	PH 537	Nano Science and Technology	4-0-0	4	None
	PH 538	Solar cells and devices	4-0-0	4	None
Elective IV (4 credits)	PH 631	Advanced Quantum Mechanics	4-0-0	4	PH 403, PH 404
	PH 632	Advanced Optics & Lasers	4-0-0	4	PH 501
	PH 633	Advanced Condensed Matter Physics	4-0-0	4	PH 408, PH 503
	PH 634	Advanced Electrodynamics	4-0-0	4	PH 406