M. Sc. Curriculum (PHYSICS)

Course Category	Course No.	Course Title	Contact Hours			Credit	Prerequisites
			L	T	P		
Core Courses (56 credits)	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 404	Quantum Mechanics II	3	1	0	4	None
	PH 405	Physics of Electronic Devices	3	0	0	3	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	
	PH 421	Computational Programming	1	0	2	2	None
	PH 501	Atomic and Molecular Physics	3	1	0	4	None
	PH 502	Light Matter Interaction	3	0	3	3	
	PH 503	Condensed matter physics II	3	1	0	4	
	PH 504	Nuclear Physics	3	0	0	3	None
	PH 481	Physics Laboratory I	0	0	6	3	None
	PH 482	Physics Laboratory II	0	0	6	3	None
	PH 581	Physics Laboratory III	0	0	6	3	None
Elective Courses (14 credits)	PH 531	Measurement techniques and Cryogenics	3	0	0	3	None
	PH 532	Numerical methods & Computational Physics	3	0	0	3	None
	PH 533	Non-destructive testing lab	0	0	6	3	PH 531
	PH 534	Computational lab	0	0	6	3	PH 532
	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
	PH 631	Advanced Quantum Mechanics	4	0	0	4	PH 403, PH 404
	PH 632	Advanced optics and lasers	4	0	0	4	PH 501
	PH 633	Advanced Condensed matter physics	4	0	0	4	PH 408, PH503
	PH 634	Advanced Electrodynamics	4	0	0	4	PH 406
Electives shall include any other course of appropriate level offered by the institute and recommended by the DAC							
Seminar & Term	PH 461	Comprehensive viva-voce	0	0	0	2	None

paper (2 Credits)							
Project (12 credits)	PH571	Project I	0	0	4	2	None
	PH572	Project II	0	0	20	10	None