



Course of Study Code	Discipline Code	Discipline	SEMESTER	Course Name	Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem Credit	Internal Marks		End Sem Marks		Total Marks	Sem Marks		
											Practical	Theoretical	Practical	Theoretical				
MSC	MSCPHYS	M.Sc in Physics	I	Classical Mechanics and Special Theory of Relativity	C	MSCPHYSC101	CC- 1	4 - 0 - 0	4	20			10		40	50		
				Quantum Mechanics - I	C	MSCPHYSC102	CC- 2	4 - 0 - 0	4									
				Mathematical Methods of Physics	C	MSCPHYSC103	CC- 3	4 - 0 - 0	4									
				Computer Programming and Computational Physics	C	MSCPHYSC104	CC- 4	4 - 0 - 0	4									
				Physics Lab-I and Seminar	C	MSCPHYSC105	CC- 5	0 - 0 - 8	4									
			II	Thermal and Statistical Physics	C	MSCPHYSC201	CC- 6	4 - 0 - 0	4	24			10		40	50		
				Electrodynamics and Plasma Physics	C	MSCPHYSC202	CC- 7	4 - 0 - 0	4									
				Condensed Matter Physics	C	MSCPHYSC203	CC- 8	4 - 0 - 0	4									
				Nuclear and Introduction to Particle Physics	C	MSCPHYSC204	CC- 9	4 - 0 - 0	4									
				Physics Lab-II and Seminar	C	MSCPHYSC205	CC- 10	0 - 0 - 8	4									
				Choose from Pool of Minor Electives	MIE	See Pool	MIEC-1	See Pool	4								See Pool	50
			III	Quantum Mechanics II	C	MSCPHYSC301	CC-11	4 - 0 - 0	4	20			10		40	50		
				Atomic and Molecular Spectroscopy	C	MSCPHYSC302	CC-12	4 - 0 - 0	4									
				Advanced Optics	C	MSCPHYSC303	CC-13	4 - 0 - 0	4									
				Physics Lab - III and Seminar	C	MSCPHYSC304	CC-14	0 - 0 - 8	4									
				Choose from Pool of Minor Electives	MIE	See Pool	MIEC-2	See Pool	4								See Pool	50
			IV	Optoelectronics and Laser Physics	Any Three	MSCPHYSMJE401	(MJE1, MJE 2 & MJE3)	6+6+6=18	24				30	10	20	40	100+100+100=300	350
				Magnetic Materials and Spintronics		MSCPHYSMJE402												
				Communication Electronics		MSCPHYSMJE403												
				Nonlinear Optics and Optical Switching		MSCPHYSMJE404												
Advanced Condensed Matter Physics	MSCPHYSMJE405																	
Microwave and Quantum Devices	MSCPHYSMJE406																	
Quantum Computing and Cryptography	MSCPHYSMJE407																	
Project / Term Paper & Grand Viva	C	MSCPHYSC401		CC-15	0 - 0 - 12	6	30	20	50									
Total Credit / Marks										88					1150			

MINOR ELECTIVE COURSES

Course of Study Code	Discipline Code	Discipline	SEMESTER	Course Name	Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem Credit	Internal Marks		End Sem Marks		Total Marks	Sem Marks
											Practical	Theoretical	Practical	Theoretical		
MSC	MSCPHYS	M.Sc in Physics	II	History and Philosophy of Science	MIE	MSCPHYSMIE201	MIE-1	4 - 0 - 0	4	NA		10		40	50	NA
MSC	MSCPHYS	M.Sc in Physics	III	Electronics: Analog and Digital	MIE	MSCPHYSMIE301	MIE-2	4 - 0 - 0	4	NA		10		40	50	NA