

M.Sc. in Physics – Semester Wise Course Structure (Total 96 Credits)

Paper Code	Course Title	Credits		
Semester I				
		L	T	P
MSPHY1001C04	Mathematical Physics – I	4	0	0
MSPHY1002C04	Classical Mechanics	4	0	0
MSPHY1003C04	Electronics	4	0	0
MSPHY1004C04	General Physics Lab. – I	0	0	4
MSPHY1005C04	Electronics Lab. – I	0	0	4
MSPHY1006E04	Experimental Techniques	4	0	0
MSPHY1007E04	Advanced Optics	4	0	0
Total Credits of Semester I		28		
Semester II				
		L	T	P
MSPHY2001C04	Thermodynamics and Statistical Mechanics	4	0	0
MSPHY2002C04	Classical Electrodynamics and Relativity	4	0	0
MSPHY2003C04	Quantum Mechanics – I	4	0	0
MSPHY2004C04	General Physics Lab. – II	0	0	4
MSPHY2005C04	Electronics Lab. – II	0	0	4
MSPHY2006E04	Advanced Electronics	4	0	0
MSPHY2007E04	Materials Science			
Total Credits of Semester II		28		
Semester III				
		L	T	P
MSPHY3001C04	Quantum Mechanics – II	4	0	0
MSPHY3002C04	Optics Lab. – I	0	0	4
MSPHY3003E04	Condensed Matter Physics	4	0	0
MSPHY3004E04	Atomic & Molecular Physics	4	0	0
MSPHY3005E04	Quantum Chemistry, Spectroscopy & Photochemistry (Swayam Course)	4	0	0
MSPHY3006E04	Nanoelectronics	4	0	0
MSPHY3007E04	Quantum Chemistry and Biophysics	4	0	0
MSPHY3008E04	Project	0	0	4
Total Credits of Semester III		32		
Semester IV				
		L	T	P
MSPHY4001C04	Mathematical Physics – II	4	0	0
MSPHY4002C04	Optics Lab. – II	0	0	4
MSPHY4003E04	Nuclear and Particle Physics	4	0	0
MSPHY4004E04	Computational Physics	4	0	0
MSPHY4005E04	Magnetism and Thin Film Technology	4	0	0
MSPHY4006E04	Plasma Physics and Space Physics	4	0	0
MSPHY4007E04	Project	0	0	4
Total Credits of Semester IV		28		
TOTAL CREDIT HOURS		116		

Out of the two courses MSPHY3004E04 and MSPHY3005E04, the student can take only one course.

M.Sc. in Physics – Semester Wise Course Structure (Total 96 Credits)

Paper Code	Course Title	Credit	Type
Semester I			
MSPHY1001C04	Mathematical Physics – I	4	Core
MSPHY1002C04	Classical Mechanics	4	Core
MSPHY1003C04	Electronics	4	Core
MSPHY1004C04	General Physics Lab. – I	4	Core
MSPHY1005C04	Electronics Lab. – I	4	Core
MSPHY1006E04	Experimental Techniques	4	Elective
MSPHY1007E04	Advanced Optics	4	Elective
Total Credits in Semester I		28	
Semester II			
MSPHY2001C04	Thermodynamics and Statistical Mechanics	4	Core
MSPHY2002C04	Classical Electrodynamics and Relativity	4	Core
MSPHY2003C04	Quantum Mechanics – I	4	Core
MSPHY2004C04	General Physics Lab. – II	4	Core
MSPHY2005C04	Electronics Lab. – II	4	Core
MSPHY2006E04	Advanced Electronics	4	Elective
MSPHY2007E04	Materials Science	4	Elective
Total Credits in Semester II		28	
Semester III			
MSPHY3001C04	Quantum Mechanics – II	4	Core
MSPHY3002C04	Optics Lab. – I	4	Core
MSPHY3003E04	Condensed Matter Physics	4	Elective
MSPHY3004E04	Atomic & Molecular Physics	4	Elective
MSPHY3005E04	Quantum Chemistry, Spectroscopy & Photochemistry (Swayam Course)	4	Elective
MSPHY3006E04	Nanoelectronics	4	Elective
MSPHY3007E04	Quantum Chemistry and Biophysics	4	
MSPHY3008E04	Project	4	Elective
Total Credits in Semester III		32	
Semester IV			
MSPHY4001C04	Mathematical Physics – II	4	Core
MSPHY4002C04	Optics Lab. – II	4	Core
MSPHY4003E04	Nuclear and Particle Physics	4	Elective
MSPHY4004E04	Computational Physics	4	Elective
MSPHY4005E04	Magnetism and Thin Film Technology	4	Elective
MSPHY4006E04	Plasma Physics and Space Physics	4	Elective
MSPHY4007E04	Project	4	Elective
Total Credits in Semester IV		28	
TOTAL CREDIT HOURS		116	

Out of the two courses MSPHY3004E04 and MSPHY3005E04, the student can take only one course.