

Master of Science (M.Sc.) in Physics – 2 Year Syllabus

Duration: 2 Years (4 Semesters)

Program: Master of Science (M.Sc.) in Physics

Total Credits: 80–96 (varies by university)

Semester I

Subject Code	Subject Name
PHY101	Mathematical Physics
PHY102	Classical Mechanics
PHY103	Quantum Mechanics-I
PHY104	Electrodynamics
PHY105	Electronics & Instrumentation
PHY106P	Physics Laboratory-I

Semester II

Subject Code	Subject Name
PHY201	Quantum Mechanics-II
PHY202	Statistical Mechanics
PHY203	Atomic & Molecular Physics
PHY204	Solid State Physics
PHY205	Computational Physics
PHY206P	Physics Laboratory-II

Semester III

Subject Code	Subject Name
PHY301	Nuclear Physics
PHY302	Particle Physics
PHY303	Condensed Matter Physics
PHY304	Laser Physics & Applications
PHY305	Advanced Mathematical Methods

Subject Code	Subject Name
PHY306P	Advanced Physics Laboratory

Elective Subjects (Choose Any Two)

Subject Code	Subject Name
PHY307A	Astrophysics
PHY307B	Nan science & Nanotechnology
PHY307C	Plasma Physics
PHY307D	Renewable Energy Physics

Semester IV

Subject Code	Subject Name
PHY401	Materials Science
PHY402	Research Methodology
PHY403	Advanced Condensed Matter Physics
PHY404	Semiconductor Physics
PHY405	Dissertation / Major Project
PHY406	Seminar & Viva Voce