

Subject Name	Description
Classical Mechanics	Classical mechanics introduces the concept of Lagrangian, Hamiltonian formulation and canonical transformation.
Mathematical Physics-I	It deals with problems of Linear algebra, complex variables, special functions and Laplace transform.
Quantum Mechanics-I	The branch of mechanics that deals with mathematical description of the motion and interaction of subatomic particles, incorporating the concepts of quantization of energy, wave-particle duality & the uncertainty principle.
Nuclear Physics	It provides an overview of nuclear properties and their measurements, nuclear forces, nuclear reactions and radiation detectors.
Electronics-I	It gives an overview of the principles of diode as circuit element, amplifiers, small signal electronics, power amplifiers, thyristors and other devices, operational amplifier and its applications.
Practical-I	Exposure about analog electronics through experimental observations, analysis and interpretation of experimental data.
Electrodynamics	Study of phenomenon associated with charged bodies in motion and varying magnetic and electric fields, in which we use the concept of electrostatics, electromagnetic and Maxwell equations.

Mathematical Physics-II	Students deal with gamma and beta functions, partial differential equations in physical problems, fourier series and transform and - probability theory and random variables and explore with real life problems.
Quantum Mechanics-II	It provides knowledge about various Approximation methods for quantum mechanical problems.
Nuclear and Particle Physics	It provides the information about radioactive decays, subatomic particles, including atomic constituents such as mesons, baryons and neutrino which produced by radioactive and scattering processes.
Laser and Fiber Optics	It deals with laser system and its types and also with the transmission characteristics of optical fiber and connections.
Practical-II	Student will study the experiments using different type of laser to measure the wavelengths