Semester: I
Mathematical Physics and Classical Physics
Mathematical Physics and Classical Mechanics
Solid State Electronic Devices and circuits
Quantum mechanics I
Electrodynamics and Plasma Physics
Laboratory - I
Laboratory - II

Semester: III
Nuclear and Particle Physics
Physics and Chemistry of Nanomaterials
Laboratory - V
Laboratory - VI
Synthesis of Materials
Analog and Digital Systems
Nuclear Radiation Detectors & Accelerators
Physics of Ionosphere-Magnetosphere System
Space Technology
Neutron Physics and Nuclear Reactor Theory

Semester: II
Quantum Mechanics II & Statistical Mechanics
Atomic & Molecular Physics
Solid State Physics
Space physics
Laboratory - III
Laboratory - IV

Semester: IV
Material Characterization
Functional Materials
Nuclear Reactions, Nuclear Energy and Nuclear Models
Remote Sensing Applications
Pulse and microwave electronics
Electronic communication
Numerical Analysis and Computer Programming
Experimental Techniques with interdisciplinary applications
Project Work