

Course Name	Course Description	
General Physics	(I) 1. Foundation Mathematics 2. Mechanics 3. Rotation Mechanics 4. Relativity 5. Waves 6. Hydromechanics 7. Thermal Energy Statistics	(II) 1. Electrostatics 2. Circuitry 3. Magnetism 4. Electromagnetic Waves 5. Optics 6. Modern Physics
Electronics	(I) 1. Basic Semiconductor Physics 2. p-n Junction Diode 3. Bipolar Junction Transistor 4. Direct-bias of Field-effect Transistor	(II) 1. Alternative-Operation of Field-effect Transistor 2. Differential Amplifier 3. Operational Amplifier 4. Oscillator and Wave Generator
Electromagnetism	(I) 1. Calculus 2. Vector Analysis 3. Electrostatics 4. Special Techniques for Electrostatic Problems	(II) 1. Electric Fields in Matter 2. Magnetostatics 3. Magnetic Fields in Matter 4. Electrodynamics 5. Electromagnetic Waves
Quantum Physics	(I) 1. Special Relativity 2. Photons 3. Atomic Structures 4. Matter Waves 5. Schroedinger's Theory	(II) 1. Solution of Time-Independent Schroedinger Equation Relativity 2. One Electron Atoms 3. Multielectrons Atoms
Optics	(I) 1. Wave Motion 2. Electromagnetic Theory 3. The propagation of Light 4. Polarization	(II) 1. Interference 2. Diffraction 3. Fourier Optics
Mechanics	(I) 1. Oscillations 2. Some Methods in the Calculus of Variations 3. Hamilton's Principle — Lagrangian and Hamiltonian Dynamics	(II) 1. Central-Force Motion 2. Coupled Oscillations 3. Dynamics of Rigid Bodies
Thermal and Statistical Physics	1. Boltzmann Distribution 2. Planck Distribution 3. Chemical Potential 4. Gibbs distribution 5. Fermi gas and Bose gas	