

Course: Mechanics (PHSGCOR01T)

CO1: The student will be able to understand motion.

CO2: The student understands the importance of work and energy.

CO3: The student knows concept of viscous force and viscosity.

Course: Electricity and Magnetism (PHSGCOR02T)

CO4: To understand the concept of electric force, electric field and electric potential for stationary charges.

CO5: Able to calculate electrostatic field and potential of charge distributions using Coulomb's law and Gauss's law.

CO6: To study magnetic field for steady currents using Biot-Savart's and Ampere's circuital law.

CO7: To study magnetic materials and their properties.

Course: Thermal Physics and Statistical mechanics (PHSGCOR03T)

CO8: The learner understands heat transfer mechanism.

CO9: To understand the concept of heat and temperature.

CO10: Explain statistical distribution of system of particles and statistical ensembles.

CO11: Explain the Maxwells relations and Application.

Course: Wave and Optics (PHSGCOR04T)

CO12: Solve the equations of motion for simple, damped, and forced oscillations.

CO13: Understanding the mathematical description of travelling and standing wave.

CO14: Analyse simple example of interference, diffraction and polarization.

CO15: Be familiar with a range of equipment used in modern optics.

Course: Digital Electronics (PHSGDSE01T)

CO16: To be familiar with the concept of diodes, transistors and OP-Amps.

CO17: To be familiar with decimal to binary and binary to decimal conversion.

CO18: Study different techniques used in the formation of electrical instruments.

CO19: To be familiar with filter, rectifier and other electronics instruments.

Course: Nuclear and Particle Physics (PHSGDSE03T)

CO20: Explain basic properties of Nuclei.

CO21: Describe the experiments of Radioactivity.

CO22: To understand the concept of elementary particles.

CO23: Introduction to particle accelerators.