
ENGINEERING PHYSICS III

PHY 212**Engineering Physics III****4.0 UNITS**

The third course of a three-course sequence on introductory engineering physics. Topics covered include vibratory and wave motion in general, interference of mechanical waves and related standing wave patterns, resonance and phenomena of beats, Doppler shift of sound waves, geometrical optics and applications to lens and mirror system, diffraction interference, and polarization of light. Also covered are special relativity, photoelectric effect, Bohr-atom, continuous and discrete spectra, Compton effect, DeBroglie and wave particle duality of matter, wave mechanics modification of classical mechanics, and the nuclear atom. Lab experiments are performed spanning the broad-spectrum of topics discussed in lecture.