PHY 227: Analytical Mechanics  2 Units

Department of PHYSICS

Covenant University
1. PHY227
1.1. PHY 227: Analytical Mechanics  2 Units

Prerequisite: PHY 121

Newtonian mechanics: motion of particle in one, two and three dimensions; system of particle and collision theory; Newtonian gravitation, conservative forces and potentials, oscillations, central force problems, accelerated mechanics of continuous media; degrees of freedom, generalized coordinates, Lagranges formulation and applications; calculus of variation and the principle of least action, Hamiltons formulation of mechanics; invariance and conservation laws, oscillating systems.