

2121111 Engineering Mechanics

(3 Credit hours, Prerequisite 0402353 0302101 + 0301102)

Vectors system of forces and moments. Equilibrium. Center of mass. Center of area. Moment of inertia. Friction. The concepts of work, energy, and power. Newton's laws. Introduction to vibration and its applications. Introduction to stress and strain analysis of engineering materials under axial forces, shear forces, bending moment and torsion.