CE272A: Structural Analysis   **3-0-0-0 [9]**

Course Contents:
Stability and Determinacy of Structures; Review of shear force and bending moment diagrams in beams and frames; Plane trusses: method of joints and method of sections. Deflection of trusses: method of virtual work. Deflection of beams and frames: moment-area method, conjugate beam method, method of virtual work. Influence line diagrams and moving loads. Force and stiffness methods of analysis; Plane trusses by using method of consistent deformations; Beams and frames: method of consistent deformations, slope-deflection equation, moment distribution method. Plane trusses and beams by using direct stiffness method.