

SYLLABUS :-

Definition of composites; Micromechanics of composites: effective properties of long and short fiber reinforced composites, effective strength of composites, effective properties of piezoelectric fiber reinforced composites; Ply mechanics; Macromechanics of laminated composite structures: description of laminates, laminate moduli, static and dynamic analysis of laminated composite structures (beams, plates and shells) using shear deformation theories, failure theories, analysis of impact on laminates; Analysis of smart composite structures.