SUBJECT NO-AE40006, SUBJECT NAME- COMPOSITE STRUCTURES

LTP- 3-0-0,CRD- 3

SYLLABUS :-

Prerequisites: AE31005

3 - 0 - 0: 3 CreditsIntroduction, classification and applications; Anisotropic elasticity, unidirectional and anisotropic lamina, thermomechanical properties, micromechanical analysis, Classical composite lamination theory cross-and angle-ply laminates, symmetric, antisymmetric and general asymmetric laminates, mechanical coupling. Analysis of simple laminated structural elements, lamina failure theories, first ply failure, vibration and buckling analysis. Sandwich structures, secondary failure modes. Manufacturing of composites.