

SYLLABUS :-

Prerequisites: AE21004

3 - 1 - 0: 4 Credits Analysis of Aircraft Structures; Thin-walled structures based on elasticity approach; Torsion, bending and shear of open and closed thin-walled cells; Structural instability; Buckling of columns, linear and nonlinear theories, Southwell method, inelastic buckling, buckling under nonconservative forces. Books: T H G Megson, Aircraft Structures for Engineering Students, Edward Arnold H Ashley, Engineering Analysis of Flight Vehicles, Addison Wesley C K Wang, Introductory Structural Analysis with Matrix Method, Englewood Cliffs, Prentice Hall E F Bruhn, Analysis and Design of Aircraft Structures, Tri-State Offset Co E E Sechler and L G Dunn, Airplane Structural Analysis and Design, Dover