

SYLLABUS :-

Concept of fluid and fluid motion, Fluid kinematics, Equations of continuity and motion, Steady and unsteady unidirectional flows, Circulation and vorticity, Stokes , Kelvin s and Helmholtz s theorems, Inviscid irrotational flow and velocity potential, Conformal transformation, The Zhukovsky transformation and Zhukovsky airfoils, The boundary layer concept, Laminar boundary layer equation, Momentum Integral Equation and its solution. Books:G K Batchelor, An Introduction to Fluid Dynamics, Cambridge University PressF M White, Viscous Fluid Flow, McGraw-Hill InternationaleL Houghton and A E Brock, Aerodynamics for Engineering Students, Edward ArnoldE L Houghton and N B Carruthers, Aerodynamics for Engineering Students, Edward ArnoldJ D Anderson, Jr., Fundamentals of Aerodynamics, McGraw-Hill International