

SYLLABUS :-

Introduction to viscous effects in fluid motion. Navier-Stokes equations. Flow through pipes. Transition and introduction to turbulent flow. Laws governing motions of fluids boundary conditions principles of free surface flow. Deterministic wave theories linear waves in open water and closed basins waves in shallow and deep water shoaling, refraction and diffraction engineering properties of water waves. Non linear waves Stokes finite amplitude, shallow water and solitary waves. Long waves, Random waves and wave spectra.