

**Course Contents:**

Introduction; Review of the basic equations: continuity, momentum, and energy. Flow through closed conduits: Laminar flow, Turbulent flow, Pipes in Series and Parallel, Pipe Networks, Unsteady flow. Flow through open channels: Uniform flow, Critical flow, Gradually Varied flow, Rapidly Varied flow, Spatially Varied flow, Un-steady flow. Flow Measurement: Pressure, Velocity and Discharge measurements. Forces on immersed bodies: Drag and Lift. Basics of Irrigation Engineering: Crop water requirements, Irrigation methods.