

**Relevant Course:** Fluid Mechanics

**Relevant Department:** Mechanical Engineering, Civil Engineering, Aerospace Engineering, Chemical Engineering, Metallurgy and Materials Engineering, Biotechnology, Power Engineering, Energy Engineering, Physics, Applied Mathematics

**Relevant Semester:** 3rd

**Pre- requisite :** Engineering Mathematics with integral calculus, differential calculus and vector calculus

**Course Description and Outline:**

Kinematics of Fluid Flow: Lagrangian and Eulerian description, streamline, streakline and pathline, acceleration of a fluid element, Differential form of Conservation Equations: Continuity equation, stream-function, rotation and angular deformation, irrotational flow, velocity potential.

**Finalized topic name:** Fundamental Concepts in Fluid Kinematics