



Department of Mechatronics Engineering

Course Name: Fluid Mechanics and Machinery

Class: SE Mechatronics Engineering

Course Code: 217548 (2019 Course)

Course Objectives:

1. To study the properties of the fluids.
2. To study the dynamics of fluids.
3. To study the transport of mass, momentum and energy.
4. To study the applications of the conservation laws to flow through pipes and hydraulics machines.

Course Outcomes:

On completion of the course, learner will be able to

1. Illustrate the physical properties and characteristic behavior of fluids.
2. Illustrate the principle and applications of continuity equation.
3. Learn about the Euler's equations along the streamlines.
4. Apply the principles of turbulent Vs laminar flow to flow systems
5. Apply the concepts of friction and determine friction factors.
6. Illustrate dimensional analysis for model and similitude of hydraulic machines.
7. Illustrate the working principle of hydraulic turbines. 8. Illustrate the working principle of hydraulic pump