1.	Title of the course	Fluid Mechanics
2.	Course number	ME211L
3.	Structure of credits (L-T-P-C)	3-1-0-4
4.	New course/modification to	Modified with ME204M/FLUID MECHANICS AND HYDRAULIC MACHINES
5.	To be offered by	Mechanical Engineering
6.	Prerequisite	None
7.	**Course Objective(s):** To discuss the principles of fluid mechanics and modelling of fluid flow. To explain the engineering approaches and application of fluid mechanics concepts to engineering problems.	
8.	**Course Content:** Fluid continuum; Properties of fluids; Classification of flows; Rheological classification; Fluid statics: pressure measurement devices, buoyancy and stability; Fluid kinematics: Lagrangian and Eulerian description, vorticity and rotationality, Reynolds transport theorem, Bernoulli's equation; Conservation of mass: continuity equation; Stream function; Potential function; Conservation of momentum; Dimensional analysis; Internal flow: laminar and turbulent flow in pipes, Moody's chart; External flow: lift and drag, flow over flat plates, cylinders and spheres.	
9.	**Textbook(s):** 1. Fox R W, Philip J P and McDonald A T, Introduction to Fluid Mechanics, 10th Edition, Wiley (2021).	
10.	**Reference(s):** 1. White F M, Fluid Mechanics, 9th Edition, McGraw-Hill Inc. (2022). 2. Munson B R, Young D F, Okiishi T H and Huebsch W W, Fundamentals of Fluid Mechanics, 8th Edition, Wiley (2016).	