1.	Title of the course	Fluid Mechanics and Heat Transfer Laboratory
2.	Course number	CH211P
3.	Structure of credits (L-T-P-C)	0-0-3-2
4.	New course/modification to	Modified with CH202P/FLUID AND PARTICLE MECHANICS LABORATORY
5.	To be offered by	Chemical Engineering
6.	Prerequisite	None
7.	**Course Objective(s):** To perform experiments for demonstrating the principles of fluid flow and heat transfer relevant to chemical engineering processes.	
8.	**Course Content:** Laminar versus turbulent flow; Verification of Bernoulli's equation; Losses in pipes and bends; Flow measurement devices; Pump characteristics; Terminal velocity of a falling sphere; Flow through packed bed, fluidization; Heat conduction in solids; Free and forced convection; Unsteady heat transfer; Radiation heat transfer; Heat exchangers.	
9.	**Textbook(s):** 1. McCabe W L, Smith J C and Harriot P, Unit Operations of Chemical Engineering, 7th Edition, Tata McGraw Hill (2014).	
10.	**Reference(s):** 1. Cengel Y and Cimbala J, Fluid Mechanics: Fundamentals and Applications, 4th Edition, McGraw Hill Education (2019). 2. Dutta B K, Heat Transfer: Principles and Applications, 2nd Edition, PHI Learning Pvt Ltd (2023).	