

Course Type	Course Code	Name of the Course	L	T	P	Credits
DP	CHC205	<b>Fluid and Particle Mechanics Lab</b>	0	0	2	2

Course Objective
The course is aimed to impart hands-on training on various fundamental aspects of fluid mechanics and particle mechanics and their applications in process industries.
Learning Outcomes
Students would learn about various concepts of fluid and particle mechanics as well as functioning of relevant machines

Unit No.	List of Experiments
1	Study of the Reynolds number in different flow conditions
2	Verification of the Bernoulli's theorem experimentally
3	Measurement of discharge through venturimeter, orificemeter and rotameter
4	Determine the losses due to friction in pipes
5	Study of flow of water through helical coil
6	Study of two phase flow in a horizontal pipe
7	Study of pressure drop through packed bed
8	Study of constructional details of reciprocating pump
9	Study of characteristics of Centrifugal Pump
10	Analysis of particle size distribution
11	Study of performance of Jaw Crusher and determine the efficiency
12	Calculate the efficiency, critical speed of a ball mill for grinding and study the effect of RPM on the power consumption
13	Determine the relative grindability by using HGI
14	Determine the efficiency of the roll crusher
15	Study of filtration characteristics of a given leaf filter
16	Determine percentage recovery of coal from coal – sand mixture by using fourth flotation
17	Batch Settling of solid slurries
18	Power consumption in an agitated vessel