



SYNERGY SCHOOL OF ENGINEERING, DHENKANAL
DEPARTMENT OF MECHANICAL ENGINEERING

LESSION PLAN

SESSION- 2026-2027

SUBJECT - FLUID MECHANICS AND FLUID POWER LAB	TOTAL PERIODS- 60
BRANCH- MECHANICAL ENGG SEMESTER- 3 rd	COURSE CODE- MEPC215
NAME- MIHIR KU. SWAIN LECTURER & Aswini Parida, Lab Asst.	Start Date- 01/07/2026 End Date- 05/11/2026

Sl No.	week	Day (2 period/day)	Topic To be Covered
1	1ST	1st day	INTRODUCTION
		2nd day	INTRODUCTION
2	2ND	1st day	Verification of Bernoulli's theorem
		2nd day	Verification of Bernoulli's theorem
3	3RD	1st day	Determination of Coefficient of Discharge of Venturi meter.
		2nd day	Determination of Coefficient of Discharge of Venturi meter.
4	4TH	1st day	Determination of Coefficient of Discharge, coefficient of contraction and coefficient of velocity of Orifice meter.
		2nd day	Determination of Coefficient of Discharge, coefficient of contraction and coefficient of velocity of Orifice meter.
5	5TH	1st day	Determination of coefficient of friction of flow through pipes.
		2nd day	Determination of coefficient of friction of flow through pipes.
6	6TH	1st day	Determination of force exerted by the jet of water on the given vane.
		2nd day	Determination of force exerted by the jet of water on the given vane.
7	7TH	1st day	Determination of minor losses of flow through pipes.
		2nd day	Determination of minor losses of flow through pipes.
8	8TH	1st day	Calibration of pressure gauge using dead weight pressure gauge tester.
		2nd day	Calibration of pressure gauge using dead weight pressure gauge tester.
9	9TH	1st day	Trial on centrifugal pump to determine overall efficiency.
		2nd day	Trial on centrifugal pump to determine overall efficiency.
10	10TH	1st day	Trial on reciprocating pump to determine overall efficiency.
		2nd day	Trial on reciprocating pump to determine overall efficiency.
11	11TH	1st day	Trial on Pelton wheel /Francis/Kaplan turbine to determine overall efficiency.
		2nd day	Trial on Pelton wheel /Francis/Kaplan turbine to determine overall efficiency.
12	12TH	1st day	Analysis of Hydraulic circuits in a hydraulic trainer
		2nd day	Analysis of Hydraulic circuits in a hydraulic trainer
13	13TH	1st day	Analysis of pneumatic circuits in a pneumatic trainer
		2nd day	Analysis of pneumatic circuits in a pneumatic trainer
14	14TH	1st day	EVALUATION
		2nd day	EVALUATION
15	15TH	1st day	QUIZ TEST
		2nd day	EVALUATION

Parida
02/06/2026
Sign of Lab Asst.

M. K. Swain
21/6/26
Sign of Faculty

Aswini Parida
21/6/26
HOD
MECHANICAL ENGG. DEPT.
SSE, Dhenkanal