THERMODYNAMICS-ILAB (ME-221L)

Pre-requisite: None
Credit Hours: 01
Contact Hours: 48

RECOMMENDED BOOK(S)

Thermodynamics Lab Manual

REFERENCE BOOK(S)

Thermodynamics by Estop Mckonky.

COURSE OBJECTIVES

To able students to demonstrate the application of the First Law, Second Law, conservation of mass and properties of substances to practical engineering systems.

S. No.	CLO/PLOS MAPPING	DOMAIN	PLO
1	Operate thermometers, Marcet Boiler, Mini Steam Turbines, and Compressors to determine various thermodynamics properties.	P3	04
2	Setup various experimental apparatus such as the Boyle's Law, dead weight tester etc. accurately.	P2	02
3	Demonstrate the four and two stroke engines, carburetor and radiator of internal combustion engine to Observe different thermodynamics processes.	P4	04

COURSE CONTENTS

To Study the Layout of Thermodynamics Lab
To Study various temperature measuring Apparatus and to find their Accuracy or Calibration of different temperature measuring Apparatus
The Calibration of Pressure Gauge by Using Plunger and Weights
To measure the Relative Humidity of air in the thermodynamics Laboratory by using Dry bulb Hygrometer and Wet bulb Hygrometer
To Find the Relationship between Pressure and Temperature by Using Marcet Boiler or To Verify the Gay Lussac's Law by using Marcet Boiler
To Study the working and sensitivity of different temperature measuring Instruments
Study of Internal Combustion Engin
Study of Two Stroke Petrol Engin
Study of Four Stroke Petrol Engine
Study of Steam Bench Apparatus