

Fluid Mechanics & Machines Laboratory

This Lab is intended to make the students aware of the all the aspects which comes under the fluid flow. The experiments include flow measurement, practical applications of the basic principles of fluid mechanics and the study of major tools used. The hydraulics lab comprises of the performance tests of pumps and load tests on turbine test rigs.

Major Equipments

Venturimeter & Orificemeter

Orifice & Mouth piece

Reynold's Apparatus

Notches (V & Rectangular type)

Metacentric Height Apparatus

Bernouli's Theorem Apparatus

Francis Turbine

Kaplan Turbine

Pelton Turbine

Centrifugal Pump

Reciprocating Pump

Gear Pump

Submersible Pump



Manufacturing Technology Lab 1

This lab emphasizes the use of different types of machines used in production field and make the students apt for the industry. To study the principle of operation, work holding and different operations of reciprocating machines like slotter and shaper.

Major Equipments

All Geared Lathe

Cone Pulley Lathe

Universal Milling Machine

Power Hacksaw

Bench Grinder

Slotting Machine

Shaping Machine

Radial Drilling Machine





Heat Transfer Lab

This lab teaches the use of instrumentation and apparatus that are unique and/or special to the field of heat transfer. It demonstrates the fundamental aspects of heat transfer and employ's experimental principles and thought processes to solve engineering problems.

Major Equipments

Refrigeration Test Rig

Emmisivity Measurement Unit

Heat Transfer Through lagged pipe apparatus

Forced Convection Unit

Natural Convection Unit

Parallel Flow and Counter Flow Heat Exchanger Unit

Thermal Conductivity of insulating powder Unit



Mechanical Engineering Lab

The objective of mechanical engineering lab is to impart practical knowledge on the working of some basic instruments that are worked based on basic principles of engineering. This lab gives thorough idea about some principles that they already studied in previous years. Students become aware about the practical applications of Mechanical Engineering branch in our day to day life.

Major Equipments

Universal Governor

Motorized Gyroscope

Monocular Metallurgical Microscope

Vibration Testing for Free & Forced Apparatus

Whirling of Shaft Demonstrator

Air Compressor Single Stage Test Rig

Multi Stage Test Rig

Blower Test Rig



Heat Engines Laboratory

This lab makes the student understand about the design concepts and principles of various engine components. It also imparts basic knowledge to students with respect to transmission system of automobiles and will enable the student to understand the latest developments in the field. This lab promotes the ability to select the appropriate strategy and equipment needed to perform a repair task. The heat engines lab comprises of the performance tests on various engines.

Major Equipments

Petrol Engine Test Rig

Diesel Engine Test Rig

Flash and Fire Point Apparatus

Say Bolt Viscometer Apparatus

Cut Section Models & Working Models



Metrology & Mechanical Measurements Laboratory

This lab enables students to be familiar with the concepts of measurement. Students are trained to handle different measurement instruments like profilometer, strain gauges etc. The importance of dimensions in the industry and a close study of accuracy during manufacturing and machining various mechanical components.

Major Equipments

Profile Projector

Tool Makers Microscope

Roughness Measuring Instruments

Force Measuring System

Water Meter



CAD/CAM Lab

Computer-Aided Design (CAD) is the use of computers to assist in the creation, modification, analysis and optimization of an Engineering design and Computer-Aided Manufacturing (CAM) is the use of computer systems to plan, manage, and control the operations of a manufacturing plant through direct or indirect computer interface with plant's resources. This lab, which is equipped with sufficient number of computer systems, helps the students to familiarize with the use of software in design and analysis.

Softwares

SOLID EDGE

AutoCAD



