

## **DIPLOMA IN MECHANICAL & AUTOMOBILE ENGINEERING LAB FACILITY**

SL. NO	COURSE CODE	NAME OF THE COURSE
1	SLPC1007	PROFESSIONAL COMUNICATION-I LAB
2	DPCS1008	COMPUTER FUNDAMENTALS LAB
3	SPYO1001	SPORTS AND YOGA
4	DPME1009	WORKSHOP PRACTICE
5	PHYE1015	APPLIED PHYSICS-II LAB
6	SLPC1016	PROFESSIONAL COMUNICATION-II LAB
7	DPCS1009	ARTIFICIAL INTELLIGENCY
8	CHEM1017	BASIC CHEMISTRY LAB
9	DPME2006	APPLIED MECHNICS LAB
10	DPME2007	THERMAL ENGINEERING LAB
11	DPME2026	MANUFACTURING PROCESS LAB
12	DPEE2011	BASICS OF ELECTRICAL & ELECTRONIC ENGG. LAB
13	DPME-2028	MECHANICS OF SOLID LAB
14	DPME-2014	CONCEPT OF HEAT TRANSFER LAB
15	DPME-2027	HYDRAULICS AND HYDRAULIC MACHINES LAB
16	DPME-2016	CAD LAB
17	DPME-2017	INSPECTION & QUALITY CONTROL LAB
18	DPME-9001	DISRUPTIVE TECHNOLOGY
19	DPME3004	THEORY OF MACHINE LAB
20	PDSS3008	PERSONALITY DEVELOPMENT & SOFT SKILLS
21	DPME-9998	FIELD VISIT AND PRESENTATION OR MINOR PROJECT
22	DPME-9999	MAJOR PROJECT

### **WORKSHOP (DPME-1009/1017)**

#### **1. Brief Description of the Lab-**

This lab is common for Diploma 1<sup>st</sup> year students of all engineering discipline. In this lab the students is expected to learn the critiques of basic process required to manufacturing a product through demonstration and practice. After completion of this course the students will be able to manufacture the simple product of their own choice. This laboratory is comprised of five shops namely: Lathe machine shop, Paint shop, Welding Shop and Sheet Metal Shop.

#### **2. Equipment Used in the Lab-**

Lathe machine, Gas welding setup, Electric Arc Welding Setup, Wood working Lathe, Vices

and stakes, Setup to perform soldering.

### 3. Photograph-





## APPLIED MECHANICS LAB (DPME2006)

### 1. Brief Description of the Lab

This lab is in the curriculum of third semester of Diploma in Mechanical, Automobile & Civil Engineering. In this lab the students are expected to learn the critiques of basic Mechanics. In Applied Mechanics students are exposed to learn about to calculate various types of forces acting on a machine with the help of free body diagram using analytical methods.

### 2. Equipment Used in the Lab

Simply supported beam, Universal Force table, Worm and Worm wheel, Simple Screw jack, Jib Crane, Wheel and Axle, Worm and Worm Wheel.

### 3. Photograph



## **MANUFACTURING PROCESS LAB (MEE243)**

### **1. Brief Description of theLab**

This lab is in the curriculum of third semester of B. Tech. 2st year students of mechanical engineering discipline. In this lab the students is expected to learn the basics of casing and welding through practical exposure. The objective of this course is to carry out exercise in foundry shop and welding shop. On completion of this course, the students will be able to produce simple cast components, join the metals using different welding techniques and to carry out exercise using different welding techniques.

### **2. Equipment Used in theLab**

Tilting Furnace, Strength Testing Machine for sand mould, Permeability Testing Apparatus, TIG Welding Machine, MIG Welding Machine

### **3. Photograph**



**Lathe Machine Shop**

## **Mechanics of Solid Lab (DPME)**

### **1. Brief Description of theLab**

Strength of material laboratory is methodology to supplement the theoretical knowledge gained in Mechanics of Solid and Strength of Materials with practical testing under variable loads. This would enable the student to have a clear understanding of mechanical properties of the standardsamples.

## **2. Equipment Used in the Lab**

Impact testing machine , Spring Test , Hardness testing Machine,

### 3. Photograph



## **THERMAL ENGINEERING LAB (DPME2007)**

### **1. Brief Description of the Lab-**

A well equipped thermal engineering systems lab to carry out experiments independently. This lab caters to the needs of B.Tech. Mechanical Engineering and B.Tech. Automobile Engineering programmes. There are 05 experimental setups available in the laboratory.

### **2. Equipment Used in the Lab-**

Centrifugal Blower Test rig, Multi stage air compressor, Vapour compression, refrigeration system test rig, Air conditioning test rig, Four cylinder four stroke petrol engine to perform Morse Test.

### **3. Photograph**





