

MECHANICAL ENGINEERING DEPARTMENT

About us

Mechanical engineering is a discipline of engineering that enforces the principles of engineering, physics, design, manufacturing, materials science and maintenance of mechanical systems. As we know mechanical engineering is the mother of all other disciplines of engineering, but it became the particular domain of specification in 18th century during the industrial revolution in Europe. It is the branch of engineering that associate the generation and use of heat and mechanical power to outline the design, production and operation of machines and instruments. At Cambridge Institute of Polytechnic you will learn all the techniques in step by step process so that you can place your feet in the real world as the best mechanical engineer.

The department is enriched with highly qualified and well experienced faculties ready to take challenges of mentoring the future Diploma Engineers, who are fit to take any challenges in the field. Regular industrial visits, Industrial training, interaction with field experts along with participation in various co-curricular events is facilitated by the staff of the department in the interest of students for the better grooming and overall development of the students.

Vision

Impart quality education to create world class Technical Professionals and Entrepreneur to meet the changing need of Industries and Society.

Mission

- To develop and deliver quality academic programs in Emerging field of Mechanical Engineering to empower the students to meet industrial needs with environmental concern.
- To adopt the best Instructive methods to maximize knowledge transfer.
- To provide the best facility, infrastructure and environment to the students and faculty members, creating an ambience conducive for excellence in Mechanical Engineering education.
- To impart quality education to inculcate moral values, professional ethics and Entrepreneurial qualities.

Laboratories

Engineering Mechanics Lab

- Zip Crane apparatus
- Lami's theorem (Force table)
- Polygon of force apparatus
- Combined inclined plane and friction slide apparatus
- Screw Jack apparatus
- Law of moments apparatus



Fluid Mechanics and Machinery Lab

- Pelton Wheel test rig.
- Bernoulli's theorem apparatus
- Centrifugal pump test rig.
- Dead weight pressure gauge apparatus
- Venturimeter apparatus
- Orifice meter apparatus
- Reciprocating pump test rig.
- Losses in pipe apparatus



Strength of Materials Lab

- Computerised Universal Testing machine
- Rockwell hardness Testing machine
- Brinell Hardness Testing machine
- Torsion Testing machine
- Impact Testing machine



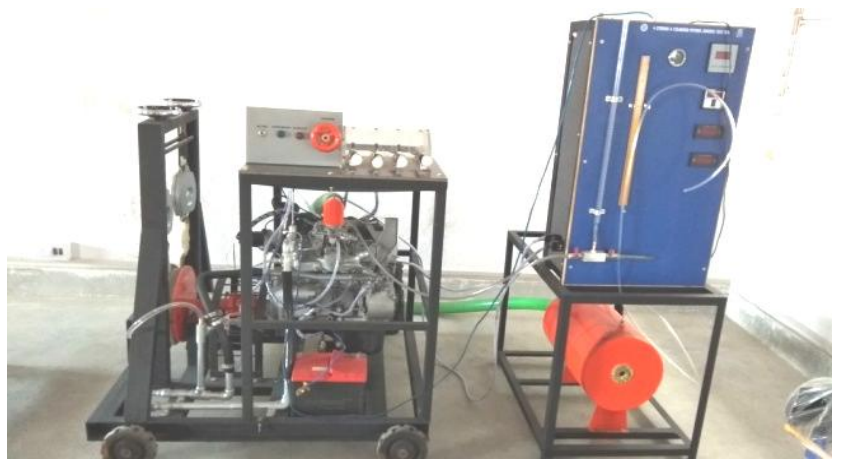
Automobile Lab

- Four stroke four cylinder petrol engine model
- Four stroke four cylinder diesel engine model
- Model of four stroke petrol engine
- Model of four stroke diesel engine
- Differential Model
- Rack and pinion steering gear box
- Rigid axle suspension system
- Single plate coil spring clutch model



Power Engineering Lab

- Four stroke four cylinder petrol engine
- Refrigeration Test Rig
- Exhaust gas analyzer
- Double stage air compressor test rig
- Hydraulic brake system
- Model of Steam engine



Production Process Lab

- CNC Lathe Trainer



Thermal Engineering Lab

- Apparatus for Verification of Stefan Boltzmann Law
- Apparatus for thermal conductivity of metallic rod
- Model of different boilers and heat exchanger



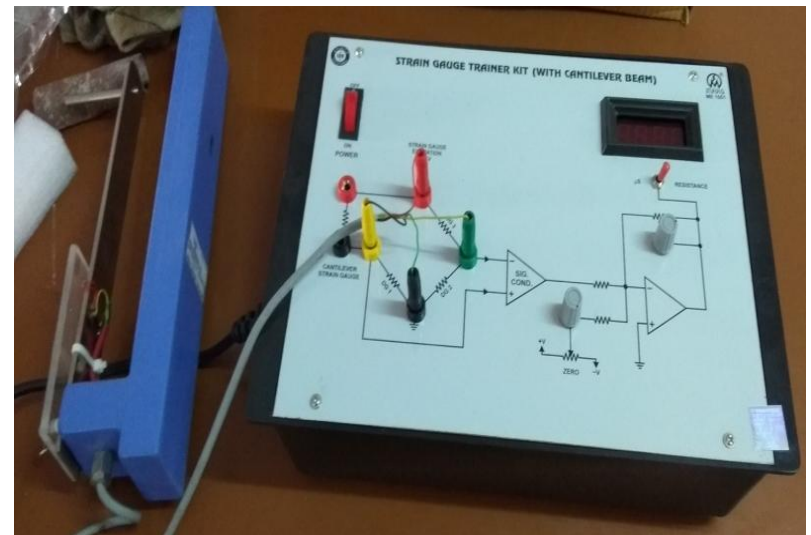
Theory of Machine Lab

- Bicycle freewheel sprocket mechanism
- Cam and follower model
- Model of gears
- Power transmitted by belt drive
- Mechanical braking system
- Two wheeler clutch model



Measurement and Control Lab

- Rotameter apparatus
- Speed measurement module kit
- Load cell trainer kit
- Strain gauge trainer kit
- Thermistor characteristic apparatus
- Thermocouple trainer kit



Metrology and Quality control lab

- Micrometer
- Vernier caliper
- Combination set
- Thread micrometer
- Dial indicator
- Sine bar
- Slip gauge, filler gauge
- V- block



Faculty details

Prof. Prabhat Kumar Adjunct Faculty	B.Sc.Engg- Mechanical Engineering P.G. Diploma - Equipment Design P.HD- Research In Development of Energy system (Persuing) Experience- 38 years in Industry and 10 years In teaching Email id- prabhat.mala13@gmail.com
Mr.Jitendra Kumar Lecturer	B.Tech- Mechanical Engineering M.Tech- Heat,Power and Thermal Engineering (persuing) Experience- 5 years in teaching Email id- jitendrapuja1988@gmail.com
Mr.Jaidev Kumbhakar Lecturer	B.Tech- Mechanical Engineering M.Tech- Thermal Engineering Experience- 2 years in teaching Email id- jaik522@gmail.com
Mr.Modassir Nazer Lecturer	B.Tech- Mechanical Engineering M.Tech- Production Engineering Experience- 1 year in Industry and 2 years in teaching Email id- modassirnazer111290@gmail.com
Mr. Suresh Pratap Lecturer	B.Tech- Mechanical Engineering M.Tech- Production Engineering (Persuing) Experience- 2 years in teaching Email id- sureshpratap@yahoo.com
Mr. Akash Kumar Lecturer	B.Tech- Mechanical Engineering Experience- 4 years in Industry Email id-ak790165@gmail.com

Lab Technician details

Mr. TabrejAlam	Diploma in Production Engineering Advance diploma in foundry technology Experience- 6 years in Industry Email id- tabrej_355@rediffmail.com
Mr. BaldebMondal	Diploma in Mechanical Engineering Email id- baldebmondal@gmail.com

Workshop Staff

Mr. Shailesh Sharma (Instructor)	Experience- 30 years in Industry
Mr. Mahesh Kumar (Welder)	Experience – 15 years in Industry
Mr. Ajay Toppo (Machinist)	
Mr. Pankaj Vishwakarma (Sheet metal)	
Mr. Roshan Topno (helper)	
Mr. Jaleshwar Karmali (helper)	