

## CNC and Machine Shop



<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1	Lathe Machine.
2.	Shaper Cutting Machine.
3.	Horizontal Milling Machine.
4.	Drilling Machine.
5.	CNC Turning Machine.
6.	CNC Milling Machine.

## Welding Shop



<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1	Tungsten Inert Gas Welding (TIG).
2.	Metal Inert Gas Welding (MIG).
3.	Electric Arc Welding Machine
4.	Single Spot Welding Machine

## Foundry Laboratory



<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1	Stir Casting Machine.
2.	Digital Universal Strength Machine.
3.	Digital Permeability Tester.
4.	Digital Moisture Tester.
5.	Hot Air oven.
6.	Digital Sieve Shaker.
7.	Sand Muller.

## Fluid Mechanics Laboratory



<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1	Bernoulli's Theorem Apparatus.
2.	Metacentric Height Apparatus.
3.	Venturimeter Apparatus.
4.	Orificemeter Apparatus.
5.	V-Notch Apparatus.
6.	Reynolds Experiment Apparatus.
7.	Friction Factor Apparatus.

## Theory of Machines Laboratory



Sr. No.	Name of Apparatus/Machine
1	Four bar mechanism and its inversion model kit.
2.	Single & Double slider crank mechanism & its inversion model kit.
3.	Brakes models.
4.	Coriolis effect apparatus.
5.	Gyroscopic couple measuring apparatus.
6.	Epicycle gear train apparatus.
7.	Cam apparatus.
8.	Universal coupling apparatus.
9.	Differential model.
10.	Whirling shaft experiment apparatus.
11.	Transmission system (gear boxes) models.
12.	Bell crank lever apparatus.

## Refrigeration and Air-conditioning Laboratory



Sr. No.	Name of Apparatus/Machine
1	Cascade refrigeration test rig.
2.	Compound compression test rig.
3.	Multi-evaporator test rig.
4.	Refrigeration test rig.
5.	Cooling tower test rig.
6.	Water cooler test rig.
7.	Vapour absorption test rig.
8.	Air conditioner test rig.

## Mechanical Vibrations and Tribology Laboratory



Sr. No.	Name of Apparatus/Machine
1	Universal Vibration Apparatus.
2.	Wear and Friction Monitoring Apparatus.
3.	Four Ball Tester.
4.	Dry Abrasion Tester.
5.	Surface Roughness Tester.
6.	High Energy Planetary Ball Milling Machine.
7.	Vibratory Sieve Shaker.

## Mechanics of Solids Laboratory



Sr. No.	Name of Apparatus/Machine
1	Universal Testing Machine (UTM)-40 Tonnes.
2.	Hot Compression Moulding Machine-30 Tonnes.
3.	Rockwell Hardness Testers.
4.	Vicker Hardness Tester.
5.	Torsion Testing Machine.
6.	Impact testing Machine.
7.	Erickson Coupling Tester.
8.	Worm and Worm Wheel Arrangement.
9.	Extension and Compression of Spring Apparatus.

## Materials Engineering Laboratory



Sr. No.	Name of Apparatus/Machine
1	Abrasive Cut Off Machine (Table Model) RACM-55.
2.	Belt Grinder (Polisher) Model RBP-100 ‘CE Marked’.
3.	Muffle Furnace (Industrial Model) Model RSMF-12.
4.	Hot Mounting Press Model RHM-2B-30 ‘CE Marked’.
5.	Digital Single Disc Polishing Machine RPM-22D ‘CE Marked’.
6.	Standard Samples of Metallurgical Microstructure (set consists of 23).
7.	Inverted Trinocular Metallurgical Microscope RMM-88 ‘CE Marked’ with Procam 5 MP Color CMOS Camera & Image Analysis Software Microcam 4.0.
8.	Toolmaker Microscope with Digital Read Out (DRO) Model RTM-99A.
9.	Digital Magnetic Stirrer with Hot Plate (5 Ltr) RSTI-156.
10.	Rotary Evaporator.

## Heat Transfer and Advanced Heat Transfer Laboratory



<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1	Heat Transfer in Natural Convection Apparatus.
2.	Stefan Boltzmann Constant Apparatus.
3.	Heat Transfer in Forced Convection Apparatus.
4.	Heat Transfer through a Composite Wall.
5.	Heat Transfer through a Metal Rod.
6.	Heat Pipe Demonstrator.
7.	Heat Transfer through Insulating Powder.
8.	Heat Transfer through an Insulating Slab.
9.	Heat Transfer in a Pin Fin Apparatus.
10.	Heat Transfer though a Double Pipe Heat Exchanger.
11.	Unsteady Heat Transfer Apparatus.
12.	Heat Transfer through a Plate Type Heat Exchanger.
13.	Dropwise and Filmwise Condensation Apparatus.
14.	Emissivity Measurement Apparatus.
15.	Evaporative Dissipator Apparatus.

## CFD and ANSYS Laboratory



<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1.	30 Desktop Computers/Workstations (Including Monitor, Keyboard, Mouse, CPU, 16-Battery PSU).

## Automobile Engineering Laboratory



<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1	Petrol Engine.
2.	Differential.
3.	Steering Arrangement.
4.	Fuel Supply System of a Diesel Engine.
5.	Hydraulic Brake.
6.	Dismantling Parts of Maruti 800cc Car.
7.	Ignition System of an Automobile.
8.	Petrol Engine Cut Section.
9.	Diesel Engine Cut Section.
10.	Fuel Supply System of a Petrol Engine.

## CAD/CAM/SolidWorks/EGD Laboratory



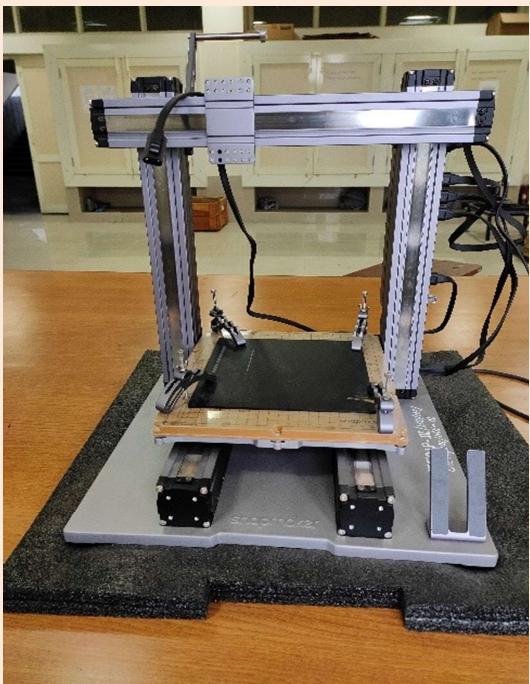
<b>Sr. No.</b>	<b>Name of Apparatus/Machine</b>
1.	25 Desktop Computers/Workstations (Including Monitor, Keyboard, Mouse, CPU, 16-Battery PSU).

## Mechatronics Laboratory



Sr. No.	Name of Apparatus/Machine
1	Pneumatic Trainer System.
2.	Hydraulic Trainer System.
3.	Advance PLC (Programmable Logic Control) with digital and Analog Input/ output, 9 nos. of modules.
4.	Process Control Trainer.
5.	Ultrasonic Distance Measurement Sensor Trainer.
6.	Accelerometer Trainer.
7.	Proximity Sensor Trainer.
8.	Color sensor trainer.
9.	Touch Panel Board.
10.	DC Brushless Motor Trainer-24v.
11.	DC Stepper Motor Trainer-24v.
12.	Temperature trainer.
13.	Pressure Measurement Kit.
14.	A/D Converter Kit.
15.	D/A Converter kit.
16.	2 Mhz Function generator with Built-in 6 digit counter (30Mhz).
17.	3 ½ Digital Multimeter with Intelligent Terminal Blocking System.
18.	Digital Oscilloscope (25MHz, 500MSa/s, 5.7" Color Display).
19.	Dual Channel Adjustable Regulated Power Supply (3A).
20.	Microcontroller Development Package.
21.	8051 microcontroller board with USB Programming.
22.	Interfacing modules.
23.	PC Based transducer development board.

## 3D Printing and Robotic Arm



Sr. No.	Name of Apparatus/Machine
1.	3D printer
2.	Robotic arm