

Engineering Workshop



Engineering Workshop with an area of 235 sq.m. provides facility for doing the workshop activities such as

- ❖ Carpentry
- ❖ Fitting
- ❖ Tin Smithy
- ❖ House Wiring

Building Materials and Construction Technology Lab



Building Materials and Construction Technology Lab with an area of 94 sq.m. is furnished with the tools for enabling the students learn about the masonry, reinforcement, bar bending, painting, house wiring, shuttering and scaffolding, plumbing and sanitation and physical observation of construction materials and construction equipment.

Surveying Lab



Surveying Lab with an area of 94 sq.m. Is equipped with the following equipment/instruments for determining the terrestrial or three-dimensional positions of points and the distance and angles between them. The lab is facilitated by the equipment such as

- ❖ Planimeter - Analogue
- ❖ Prismatic Compass
- ❖ Surveyor's Compass
- ❖ Plane Table
- ❖ Dumpy Level
- ❖ Tilting Level
- ❖ Optical Square
- ❖ Prism Square
- ❖ Line Ranger
- ❖ Abney Level
- ❖ Hand Level
- ❖ Indian Clinometer
- ❖ Pantograph
- ❖ Box Sextant
- ❖ Trimble M3 Total Station – 5 Seconds
- ❖ Pentax Auto Level - 28X Magnification
- ❖ Standard Vernier Theodolite – 20 Sec.

Strength of Materials Lab



Strength of Materials Lab with an area of 141 sq.m. provides facility for determining the mechanical properties of materials with the equipment such as

- ❖ Analog Universal Testing Machine – 60 T
- ❖ Rockwell cum Brinnell Hardness Tester
- ❖ Impact Testing Machine
- ❖ Hand Operated Spring Testing Machine
- ❖ Electrical cum Hand Operated Compression Testing Machine
- ❖ Analog Torsion Testing Machine
- ❖ Test Setup for Deflection Measurement of Cantilever Beam
- ❖ Test Setup for Deflection Measurement of Simply Supported Beam
- ❖ Test Setup for Deflection Measurement of Overhanging Beam
- ❖ Test Setup for Deflection Measurement of Continuous Beam

Fluid Mechanics and Hydraulic Machinery Lab





Fluid Mechanics and Hydraulic Machinery Lab with an area of 188 sq.m. provides facility for the study of various parameters of fluid and hydraulic machineries with the equipment such as

- ❖ Venturimeter and Orifice Meter
- ❖ Pipe Friction – Major Loss
- ❖ Sudden Contraction – Minor Loss
- ❖ Bernoulli's Theorem
- ❖ Single Stage Centrifugal Pump
- ❖ Multi Stage Centrifugal Pump
- ❖ Small Orifice
- ❖ Francis Turbine
- ❖ Kaplan Turbine
- ❖ Pelton Wheel
- ❖ Hydraulic Flume
- ❖ Impact of Jet on Vanes
- ❖ Reciprocating Pump
- ❖ Notch Apparatus

Engineering Geology Lab



Engineering Geology Lab with an area of 92 sq.m. is facilitated with a vast range of minerals and rocks. The lab also houses the geological maps of the country and the state. Various models of geological formations and structures are also available in the lab to enable the students understand the geological structures visually.

Geotechnical Engineering Lab





Geotechnical Engineering Lab with an area of 164 sq.m. provides facility for the study of index properties and mechanical properties of soil with the equipment such as

- ❖ Liquid Limit Device Hand Operated with Counter
- ❖ Liquid Limit - Cone Penetrometer
- ❖ Shrinkage Limit Test Apparatus
- ❖ Proctor Penetrometer, Spring Type
- ❖ Rapid Moisture Meter
- ❖ Core Cutters
- ❖ Sand Pouring Cylinder (Small)
- ❖ Sand Pouring Cylinder (Large)
- ❖ Relative Density Test Apparatus
- ❖ Standard Test Sieves, 200 mm Dia.
- ❖ Sieve Shaker (Motorised)
- ❖ Hydrometer
- ❖ Permeability Test Apparatus (Constant Head Method)

- ❖ Permeability Test Apparatus (Variable Head Method)
- ❖ Standard Proctor Compaction Test Apparatus, Light Compaction
- ❖ Standard Proctor Compaction Test Apparatus, Heavy Compaction
- ❖ Universal Automatic Compactor
- ❖ Laboratory CBR Test Apparatus (Motorised)
- ❖ Soil Extruder, Rack Type
- ❖ Hydraulic Extruder
- ❖ Consolidation Test Apparatus, Single Gang
- ❖ Triaxial Test Apparatus
- ❖ Pore Water Pressure Apparatus (0-1000 KPa)
- ❖ Sensitive Volume Change Gauge
- ❖ Unconfined Compression Test Apparatus (Motorised)
- ❖ Direct Shear Test Apparatus (Motorised)
- ❖ Laboratory Vane Shear Test Apparatus (Motorized)
- ❖ Split Spoon Sampler, with Liner
- ❖ Laboratory Electric Oven
- ❖ Pycnometer
- ❖ Experimental Setup for Pullout Tests on GPA
- ❖ Experimental Setup for Pullout Tests on Reinforced Slopes

Concrete Lab





Concrete Lab with an area of 188 sq.m. provides facility for the study of properties of cement, sand; fresh and hardened properties of concrete with the equipment such as

- ❖ Vicat Apparatus with All Accessories
- ❖ Le Chatelier Apparatus
- ❖ Mortar Cube Vibrating Machine
- ❖ Blaine Air Permeability Apparatus
- ❖ Flow Table (Electrically Operated)
- ❖ Heat of Hydration Apparatus
- ❖ Specific Gravity Bottle for Cement (Le Chatelier's Flask)
- ❖ Specific Gravity Apparatus for Fine Aggregate (Pycnometer)
- ❖ Specific Gravity Apparatus for Coarse Aggregate (DensityBasket)
- ❖ Set of Sieves for Fine Aggregates (20cm diameter)
- ❖ Set of Sieves for Coarse Aggregates (45cm diameter)
- ❖ Hot Air Oven
- ❖ Mechanical Sieve Shaker
- ❖ Slump Cone Apparatus
- ❖ Compaction Factor Apparatus
- ❖ Vee – Bee Consistometer
- ❖ Cube Moulds
- ❖ Flexural Beam Moulds
- ❖ Cylindrical Moulds
- ❖ Vibration Table for 6 Moulds
- ❖ Laboratory Concrete Mixer (Hand operated / Motorized)
- ❖ Longitudinal Compressometer
- ❖ Automatic / Manual 5Litre Mortar Mixer
- ❖ Air Entrainment Meter
- ❖ Rebound Hammer
- ❖ PUNDIT: Portable Ultrasonic Tester

Highway Engineering Lab





Highway Engineering Lab with an area of 188 sq.m. provides facility for the study of properties of aggregates and bitumen and perform traffic surveys with the equipment such as

- ❖ Universal Penetrometer
- ❖ Ductility Testing Machine
- ❖ Ring and Ball Apparatus
- ❖ Pensky Marten's Apparatus
- ❖ Centrifuge Extractor
- ❖ Modified Marshall Stability Test Apparatus
- ❖ Asphalt Mixer
- ❖ Crushing Value Apparatus
- ❖ Aggregate Impact Tester
- ❖ Pycnometer
- ❖ Los Angeles Abrasion Testing Machine
- ❖ Sieve Shaker
- ❖ Saybolt Viscometer
- ❖ Thickness Gauge
- ❖ Length Gauge
- ❖ Set of Sieves for Coarse Aggregate (45 cm Diameter)
- ❖ Set of Sieves for Fine Aggregate (20cm Diameter)
- ❖ Electric Oven

Environmental Engineering Lab

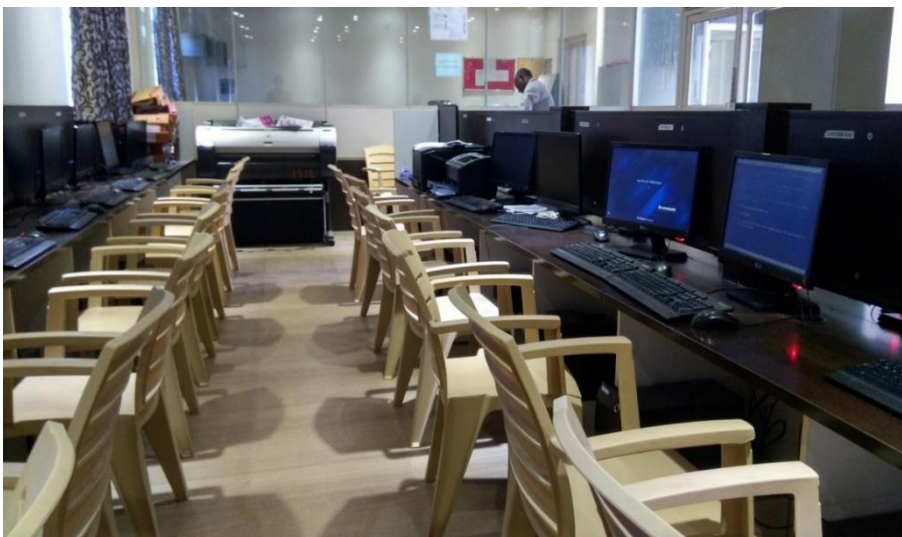




Environmental Engineering Lab with an area of 92 sq.m. provides facility for the study of various parameters of water with the equipment such as

- ❖ pH Meter
- ❖ Nephelo Turbidity Meter
- ❖ Conductivity Meter
- ❖ Hot Air Oven
- ❖ Muffle Furnace
- ❖ Jar Test Apparatus
- ❖ BOD Incubator
- ❖ UV lamp
- ❖ Water Bath
- ❖ Hot Plate
- ❖ Dissolved Oxygen Meter
- ❖ UV-Visible Spectrophotometer (Double Beam)

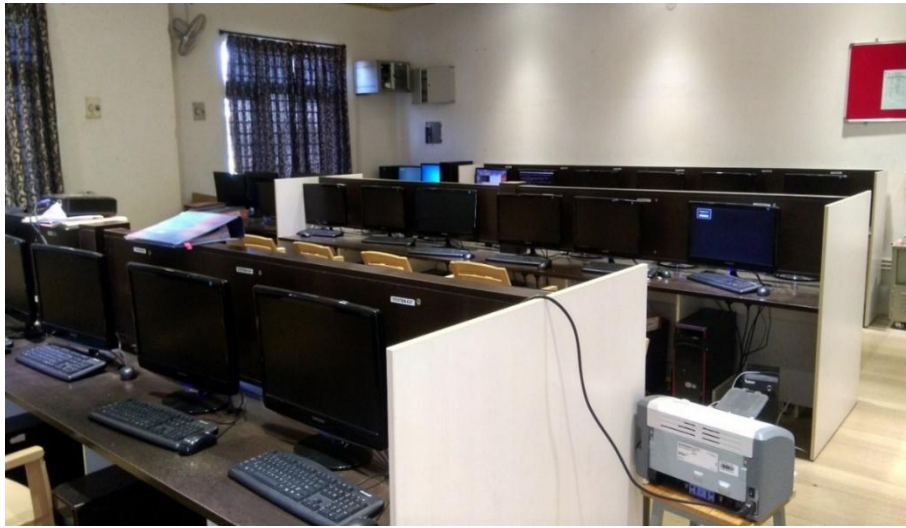
CAD Lab



The Department has well-furnished CAD Lab with an area of 117 sq.m. provided with 19" LG LED monitors configured with Intel core i3@ 3.30 GHZ, 4 GB DDR3 RAM, hard disk capacity of 500 GB and 4 GB graphic card for carrying out various software operations. The lab houses Canon Image Prograss IPF Plotter (A0 size), HP A4 CLJM251nw Colour Printer, CANON Laser Jet 2900B and HP Laser Jet 1020. The lab is equipped with software such as

- ❖ STAAD Pro V8i & STAAD Foundation V8i (5 User)
- ❖ AutoCAD 2013
- ❖ Micro Station (3 User)
- ❖ MX Road (2 User)
- ❖ ETABS V-9.7.3
- ❖ SAP 2000 V-15
- ❖ Microsoft Office

GIS Lab





The Department has well-furnished GIS Lab with an area of 68 sq.m. provided with 22" LG LED monitors configured with Intel core i7@ 3.40 GHZ, 8 GB DDR3 RAM, hard disk capacity of 1 TB and 4 GB graphics card for carrying out various software operations. The lab houses Ricoh multifunctional Device Model MPC 2030 (A3 Size), HP A4 CLJM251n Colour Printer, HP Laserjet 1020 Printer. The lab is exclusive for working on GIS and is equipped with the software Arc GIS & Arc View- Labkit V – 10.1.