

# Department of Architecture



## **Building materials museum:**

Knowledge of materials, specifications and properties of building like brick bond samples and models.



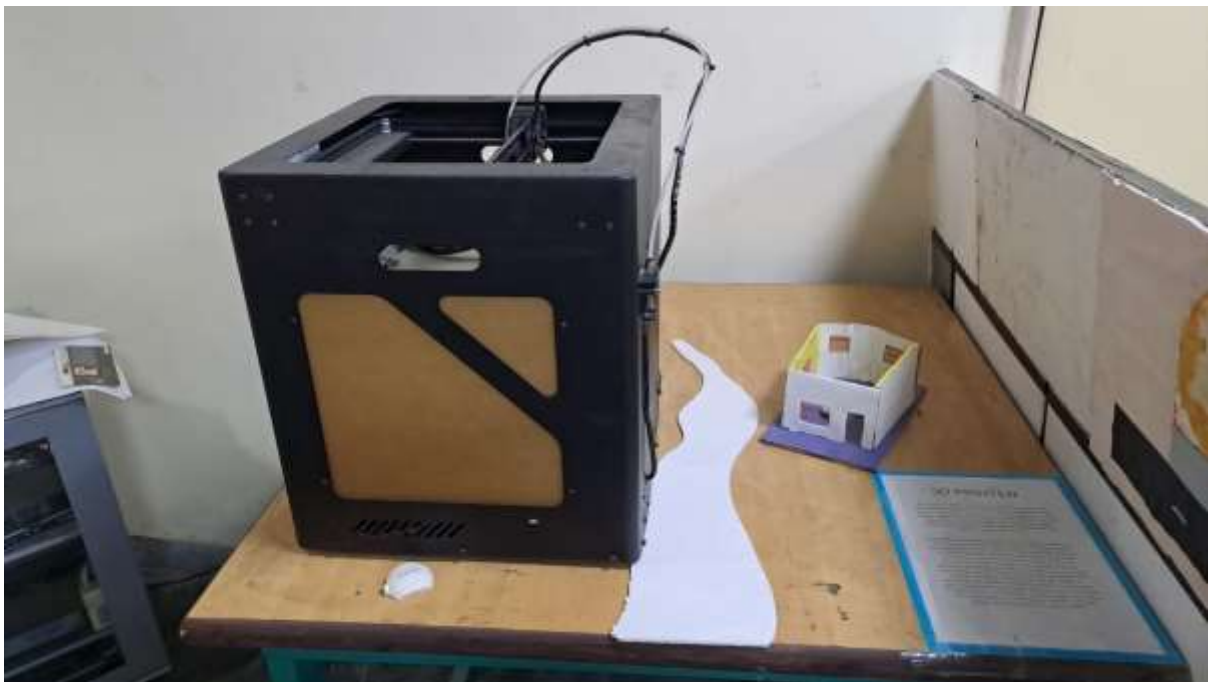
## **Carpentry Lab:**

Knowledge related to timber and wood for construction.



**Model making lab:**

Advanced building modelling and design. Beginners were trained to build models of buildings.



**3D printing lab:**

Students were trained for making building via 3d modelling.



**Construction Yard (brick model preparations)**



**Eco-design Lab and audio-visual room:**

Model making and literature studies done in this room.





Students study about climate conditions through the instruments like cup type anemometer, lux meter, sound level meter, hygrometer, etc.

## Department of Electrical Engineering



### **Basic electrical engineering lab:**

Study of DC motor, tube light, iron, fan, ohm' law, superposition theorem, max. power transfer theorem, DC shunt motor, etc.



**Power system lab:** for the study of digital multi-meter, motorised oil testing set, function generator, three phase transformer.



**Power electronics lab:** for the study of VI Characterizations for SCR, IGBT, TRIAC L, DIAC L and MOSFET.



**Advance electric drive lab** for induction motor drive, synchronous motor, switched reluctance motor drive, etc.





**Switchgear and protection lab** for the study of over current relay, earth fault relay, over voltage and under voltage relay, universal relay, insulation and continuity test, and simulation of relay characteristics.



**Measurement and instruments lab** for the study of resistance, self-inductance, capacitance, frequency, temperature, LDRC characteristics, displacement, humidity, liquid level, CT testing, etc.



**Network theory lab** for the study of superposition theorem, tellegen theorem, LC filter kit, digital multimeter, LCR meter, clamp meter, programable DC power supply, function generator, etc.



**Electronics device and circuit lab** for the study of switching action of a transistor, op-amp as inverting amplifier, non-inverting amplifier, differentiating amplifier, etc.





**Control system lab** for the study of process simulator panel, thyristor actuator panel, stepper motor panel, servo voltage stabilizer kit, temperature control kit, synchro-transmitter receiver unit, etc.



**Electrical machine lab** for the study of polarity and ratio test of single phase and 3-phase transformer, open circuit and short circuit test, efficiency and voltage regulation, DC compound motor, DC shunted and series motor, etc.



**Matlab programming for control system toolbox, simElectronics, simMechanics, fuzzy logic toolbox, wavelet toolbox, symbolic math toolbox, curve fitting toolbox, etc.**



**Digital and non-linear control laboratory for the study of analogue control module, ball and beam control system, magnetic levitation system, Industrial robot, and computer system.**

## Department of Mechanical Engineering



**Engineering workshop** consists of measurement shop, carpentry shop, machine shop, sheet metal shop, welding shop and fitting shop.



**Welding shop** for the study of various kind of welding Processes like spot welding, TIG, MIG arc welding, etc.





**Fluid mechanics lab** for the measurement of different properties of Fluid, discharge, coefficient of discharge, Bernoulli's theorem, etc.



**Heat and mass transfer lab** for measurement of thermal conductivity of powder, emissivity, forced convection, thermal conductivity of liquid and study of Stefan-Boltzmann apparatus.



**Refrigeration and air conditioning lab** for the study of air condition, household refrigeration, heat pump, ice plant, refrigeration test, etc.



**Computational fluid dynamics lab** for the study of software on heat conduction, fluid flow over flat plate, cylinders and around aero foil section, etc.



**Automobile lab** for study working of various components embedded in the automobiles.



**Mechanical vibration lab** for the study of various vibration measuring instruments.





**Dynamics of machine lab** the study of various kind of governors, gear ratio, static and dynamic balancing, dynamometers, moment of inertia determination, pressure distribution in bearings, cam follower pair study, etc.



**Fluid machinery lab** for the study of impact of jet, turbines, pumps, hydraulic ram, hydro-power plants, pelton wheels, etc.



**Applied thermodynamics lab** for the study of engines including diesel and petrol, rack and pinion model, gas turbine, turbochargers, internal expanding brake model, etc.

**Department of Civil Engineering**



**Material testing lab** for tensile, compression, torsion and bending test.



**Concrete lab** for the study of cement, coarse aggregate, fine aggregate, brick, Concrete, etc.





**Transportation lab** for the study of impact test of coarse aggregate, CBR value, penetration, ductility, flash and fire point, softening point for bitumen.



**Material testing lab** for tensile, compression, torsion and bending test.