

List of Research Equipments

1. Mechanical Engineering

- **Material Testing:**
 - Universal Testing Machines (UTM)
 - Hardness Testers (Rockwell, Brinell, Vickers)
 - Impact Testing Machine

- **Thermal Engineering:**
 - Heat Transfer Units
 - Wind Tunnels
 - Combustion Analyzers

- **Design and Manufacturing:**
 - CNC Machines
 - 3D Printers

- **Fluid Mechanics and Machinery:**
 - Fluid Flow Visualization Equipment
 - Centrifugal and Axial Pump Test Rigs
 - Hydraulic Turbine Test Rigs

2. Civil Engineering

- **Material Testing:**
 - Compression Testing Machine
 - Cement and Concrete Mix Analyzers
 - Non-Destructive Testing Equipment (NDT)

- **Surveying:**
 - Total Stations
 - GPS Surveying Systems

- **Geotechnical Engineering:**
 - Triaxial Testing Apparatus
 - Direct Shear Test Apparatus

- **Structural Analysis:**

- Shake Tables
- Structural Health Monitoring Systems

3. Electrical and Electronics Engineering

- **Power Systems:**
 - High Voltage Testing Equipment
 - Power Quality Analyzers
 - Grid Simulators
- **Electronics:**
 - Digital Signal Oscilloscopes (DSO)
 - Function Generators
 - Spectrum Analyzers
- **Renewable Energy:**
 - Wind Energy Simulators
- **Robotics and Automation:**
 - Programmable Logic Controllers (PLC) Trainers
 - Robotic Arm Kits

4. Computer Science and IT

- High-Performance Computing (HPC) Clusters
- GPUs and TPUs for AI and Machine Learning
- Virtual Reality (VR) and Augmented Reality (AR) Development Kits
- Networking and Security Labs with Firewalls and Routers

5. Common Supporting Facilities

- Rapid Prototyping Labs
- Centralized Instrumentation Facility
- Advanced Computational Labs with Simulation Software (e.g., MATLAB, ANSYS)