





Research Area-1: Power System Computational Research Facility	
	<ul style="list-style-type: none"> ➤ MATLAB ➤ Motorsolve ➤ ETAP
Research Area-2: Renewable Energy Research Lab	
	<ul style="list-style-type: none"> ➤ Solar Array Simulator
<ul style="list-style-type: none"> ➤ Wind Turbine Emulator 	
Research Area-3: Microgrid Operation and Control Research Lab	
	<ul style="list-style-type: none"> ➤ OPAL RT Windmill simulator ➤ Mixed Signal Oscilloscope 8 Channel

➤ dSpace 1104



Research Area-4: Smart Grid Research Lab



dSpace Microlabbox
Digital Storage Oscilloscope

Research Area-5: Energy Conversion and Microgrid Research Lab



- PV simulator/ Programmable DC Power Supply Ametek - TerraSAS ETS 600/8
- Bidirectional DC DC Converter TDK Lambda EZA 2500-32048
- DC Programmable Source (Delta 15kW Bidirectional Regenerative Programmable DC Power Supply; Model No. : SM 500-CP-90)
- DC Programmable Load (Chroma Make 2 kW Programmable DC Electronic Load; Model No.: 6320E-150-200)
- Enertech 5kW 3phase Inverter; Model No. : SOLAR PCU (Sunmagic +))
- dSpace-ACE KIT (Advanced Control Education Kit) 1104

- Programmable Grid Tie Source Link Bidirectional Power Supply
- Batsim Application Software For Battery Simulation Program
- Sas Control Application Software For Solar Array Simulation Software
- Matrix Convertor 25 Kva
- 9 Level Cascaded Invertor



Research Area-6: Project and Research Lab



- PMSM drive
- IM drive
- SCADA based drive control

- PLC based drive control
- Three phase induction generators set up, DSO, Power Quality Analyser
- Real Time mini FSS simulator



Research Area-7: Power Quality Lab



- dSPACE 1104
- Microlab box

- PV simulator
- Three Phase Programmable Supply



Research Area-8: Analog Signal Processing Research Lab



- Cadence Virtual Virtuoso Software Tool

Research Area -9: Control of Dynamical Systems and Computation Lab



- Twin Rotor Motor Helicopter System

- Cart Inverted Pendulum System



Research Area-10: Control and Automation Research Lab



- Two Degree Helicopter System

- Ball Plate System



Research Area-11: Embedded System and IOT Lab





- VxWorks Software developed by Wind River Systems

Research Area-12: Electric Vehicle and Intelligent Transportation System Lab



- Meshlium 4G Scanner
- Sidra intersection 9.0 Software
- Digital Storage Oscilloscope
- Traffic Simulator and Controller

<ul style="list-style-type: none"> ➤ 14 Seater Electric Bus ➤ 3 Seater E-Rickshaw ➤ Three Port Battery Charger 	
Research Area-13: Synchrophasor Lab	
	<ul style="list-style-type: none"> ➤ Siemens PMU IED ➤ Opal RT Real Time Digital Simulator ➤ Megger Relay Test Kit