

## **Thrust Areas of the Department:**

- Power System Engineering:
  - Power Generation Technology
  - Power System Dynamic and Stability
  - Unit commitment and Pricing
  - Power System Restructuring and Deregulation
  - Wide Area Measurements and Applications
  - HVDC and FACTS
  - AI Techniques and Optimization in Power System
  - Electrical Machines and AC-DC Drives
  
- Electric Vehicles:
  - Electrical Vehicular Technologies
  - Battery Technology and Battery Management
  - Grid Interfacing Issues of Electrical Vehicle
  
- Smart Grid Technologies and Micro-grids
  - Real-time pricing and Demand Response in Smart Grid Environment
  - Smart Grid Communications
  - Micro – and Nano – Grids, issues and solutions
  - Smart features in Electrical Grid
  
- Industrial Automation
  - Programmable logic Controllers
  - SCADA
  - Robotics
  - Servos
  - Variable frequency Drives
  
- Renewable Energy Sources
  - Solar Energy
  - Wind Energy
  - Fuel Cell Technology
  - Energy Audit
  
- Power Electronics & Drives
  - Converter Topologies
  - Power conditioning for Grid interfacing