

R&D Project Streams offered by CPRI

Sl. No.	Area of Research
	Branch: Electrical Engineering
1	High Voltage and Insulation Engineering, Electrical Measurements & Instrumentation, Power Electronics and Energy Converters etc
2	Energy Storage for EV application
3	Solid State Transformers
4	Reliability Studies of Smart Energy Meters under the influence of various Field Conditions
5	Application of Soft Computing Techniques for reduction of AT&C losses in power distribution operation using smart metering in smart grid
6	Classification & Pattern Recognition of Partial Discharges of Power Cables using Artificial Neural Networks and Support Vector Machine
7	Evaluation of Corona Discharges on Silicone Insulating Materials for Outdoor HV Insulation
8	Cyber Security for Power Sector Applications Secure Communication Systems for Power Sector Application
9	Smart Grid, Distribution Automation and Substation Automation Systems
10	Substation Automation and Communication Interoperability in Substation Automation
11	Automated Metering Infrastructure (AMI) for Smart Meters with Standard based Protocols
12	Analysis and Simulation of Microgrid on RTDS
13	Predictive Reliability / Predictive Assessment for Refrigerators and Air Conditioner using Historical Data
14	Power Quality issues / measurement for smart Network
15	Power Systems stability, Power Systems Protection, Microgrid, etc
	Branch: Mechanical Engineering
16	Advanced Non-Destructive Evaluation (NDE) & Remaining Life Assessment (RLA) of Plant Components Damage Mechanisms and Failure Analysis of Plant Components Power Plant Engineering Finite Element Analysis, Fracture Mechanics Reliability Analysis of NDE Techniques
17	Mechanical Engineering, Materials Engineering, Metallurgy or Ceramics
	Branch: Chemistry / Chemical Engineering
18	Development of Hybrid Electrode Materials for Asymmetric Supercapacitors Application with Enhanced Energy Density and Power Density
19	Preparation and Characterization of Bio-degradable Polymers [Poly(lactic acid) (PLA) & Polycaprolactone (PCL)] and their Composites for Capacitor Application
20	Study on Performance of Oxidation Stability of Metal Passivated Mineral insulating Oils by Rapidoxy Technique
21	Energy Storage Materials and Devices