

**Project for Engineering Students:**

**A) Electronics / Communication / Telecommunication / Instrumentation**

Sl. No.	Project Based on
1.	Modern Wireless Electronics communication-Android Tele-switching Operation, GSM Multichannel SMS Platform and Powerful Digital Networking Systems.
2.	Advanced Instrumentation and Process Control-Data Acquisition Systems,single and Multichannel type with full Computer Interactive facility, Smart Sensor Bay with varied nature of Sensors including Bio, General Industrial and Specialty Sensors, Interfacing and Actuation Technique.
3	Interactive Smart Robotics(RFID Smart Card supported)
4	Full Solid State Cooling Conditioner
5	Intelligent ATM Surveillance System
6	RF Based Radio Station
7	Wi Fi Digital Networking Project
8	Automation & Advanced Robotics- Automation Platforms, Branded Microcontroller based Systems, latest PIC (Peripheral Interface Controller) supported Platforms, coupling and driving methods of various Robotic Modules, Milling Operation, Vending Operation, Doting and Cutting Operation, Tele-surgery, Grinding and Clamping operation etc.
9	Versatile Measuring Instrument(VMI)
10	LASER Governed Cellular Base Station
11	Concept of Solar power system with LED.
12	Concept of mini PLC
13	Configuring CCTV camera
14	Advanced Net working and Internet security

**B) Computer Science & IT**

Sl. No.	Projects
1.	Core Java
2.	J2EE & Spring-Hibernate
3.	PHP My SQL
4.	Networking (Topologies, LAN Crimping, etc.)
5	DOT Net with SQL Server
6.	Python
7.	Advanced Net working and Internet security

### C) Chemical Engineering

Chemical analysis using **Spectrometer** for Ferrous and non-Ferrous alloys used in equipments / conductors for high voltage transmission lines.

### D) Civil Engineering

1.	Surveying technique using Engineer's Level, Dumpy Level, Theodolite, Total Station etc
2.	Civil AutoCAD
3.	Bitumen Testing, TMT Bar Testing , Brick Testing, Concrete Testing, Cube Testing, Cement Testing.

### E) Mechanical Engineering/ Production/ Metallurgical Engineering

Sl. No.	Project Based on Mechanical Testing of various components
1.	Destructive & non-destructive tests ( <b>Izod Impact Test, Magnetic Particle Test, Ultrasonic Test</b> )
2.	Project using <b>CNC</b> machines.
3	Type Test including Stress & Strain test of <b>ACSR / AAAC/AAC</b> conductors.
4	<b>UTS, Y/S %age of E</b> , Bend, R-Bend, Flattening and B/L of Mechanical & Electrical components.
5	Complete type test upto 400 KV for transmission and distribution lines hardware fittings.
6	Refrigeration & Air Conditioning
7	CAD/CAM
8	Non-Destructive Testing-DPT,MPI,UT,RT
9	Industrial safety
10	Ultrasonic testing
11	Radiographic testing
12	Mechanical properties of Engg. Materials.

**F) Electrical Engineering**

Sl. No.	Project Based on Testing / Calibration
1.	Pulse Width Modulation based MOSFET supported power inverter.
2.	Overhead crane practical operation principals and maintenance of the same.
3.	Mini PLC with drives
4.	Wi-Fi controlled reverse forward control of 3 phase motor
5.	.IR sensor based DC motor speed control
6.	Motor / Transformer rewinding in home appliances
7	Non conventional/Renewable lightning system(concept of solar energy and LED).
8	Testing of all types of insulators, heat cycle & temperature rise test on electrical hardware and fittings used in High tension & low tension power transmission line.
9	High Voltage & impulse test set by sphere gap method as per IEC:60052
10	Solar Photo Voltaic systems.
11	Solar Thermal Power plants.
12	Distributed Generation
13	Electrical Sub-station design
14	Smart-GRID
15	Smart Panels.
16	Electrical Protections
17	Numerical Relays.
18	Electrical Safety.

**\*\*PLC with Scada : Rockwell, Mitshubishi – 4000/- + service tax as applicable  
 Duration : 15 days continuous / 1 month (3 days per week)**

**G) Niche Technology**

Sl. No.	Courses
1	Applied Machine Learning
2	IOT