Module 1 : IAE (Industrial Automation Engineer)

- PLC (Programmable Logic Controllers)
- SCADA (Supervisory Control & Data Acquisition)
- Motion Control (Drives & Motors)
- Panel Designing & AutoCad
- Process Instrumentation
- HMI (Human Machine Interface)
- Industrial Networking/Wireless Technology
- DCS (Distributed Control Systems)
- On site Practical Exposure
- Soft Skill Development
- On site Practical exposure

Apply for IAE (Industrial Automation Engineer)

Module 2 : PLC Course

- Digital Electronics Basics
- PLC Fundamentals
- PLC Hardware & Architecture
- Source & sink Cencepts
- Wiring Different field Devices to PLC
- Introduction to PLC Programming software
- Creating new application, addressing
- Programming Languages
- Basic Programming Instructions
- Advance Instructions
- Upload / Download / Monitoring
- Forcing of I/Os
- Fault finding / troubleshooting & documentation
- Hands on experience on real time applications

Apply for PLC Course

Module 3 : SCADA Course

- Introduction to SCADA Software

- Creating new SCADA project
- Communication with PLC

- Creating & editing elementary graphic display
- Attaching controls to graphic objects
- Real time & historical trends
- Using alarms & events
- Application of scripts
- Communication with excel
- Net DDE Communication
- Fault finding / troubleshooting

Apply for SCADA Course

Module 4 : Motion Control (Drives & Motors)

- AC motors, operations & Limitations
- Motor Starters : DOL, Star-Delta, Auto Trasformer
- Motor control circuits, interlocking circuits
- Introduction to AC drives & applications
- Criteria for drives selection
- Parameter Programming
- Designing of drive control panel
- Communication with PLC, SCADA Software
- Fault finding / troubleshooting
- Soft starters & their advantages over conventional starters

Apply for Motion Control (Drives & Motors Course)

Module 5 : Panel Designing

- Introduction to switch gears & accessories
- Basics of control & power drawings
- General protection involved in panel
- Load management (connected load, running load, load factor)
- Indications (Ammeter, Volt Meter, PF & K W Meter etc.)
- Preparation of general arrangement diagrams, busbar sizing
- Electrical protection
- Preparation of power & control circuits
- General wiring guidelines / practices
- Maintenance & troubleshooting of control circuits in live panels

Apply for Panel Designing

Module 6 : Process Instrumentation

- Various transmitters / sensors used in industrial applications
- Position sensor : Photo electric, proximity sensor, encoder) working principle, types selection guidelines
- Flow measurement, working principle, types, selection guidelines

- Pressure measurement, working principle, types, selection guidelines
- Load measurment, load cells
- Level measurement, working principle, types, selection guidelines
- Solenoid valves, control valves, smart transmitters
- Instrument transformers (CT,VT)
- Process control basics, closed & open loop control
- Process controllers (on-off, proportional, PID)

Apply for Process Intrumentation

Module 7 : HMI (Human Machine Interface)

- Getting started with HMI
- Creating applications, creating tags
- Downloading / uploading programs
- Creating alarm messages
- Communication with PLC
- Fault diagnostics

Apply for HMI (Human Machine Interface)

Module 8 : Distributed Control System

- Introduction to DCS
- DCS applications
- Hardware : processor, I/O modules, communications, bus redundancy etc.
- Application difference between PLC & DCS
- Hands-on practical on DCS Systems

Apply for DCS(Distributed Control System) Training

Module 9 : Industrial Networking

- Different Network Topologies & their importance
- Training on Nodes, Ports, Drivers, Hardware
- Ethernet , Modbus , Profibus , fieldbus
- Ethernet/IP, Wireless Remote I/Os
- Hands-on practical on Networking of PLC.

Module 10 : CNC(Computerized Numeric Control)

- Introduction
- CNC Controllers
- Codes(G codes, M codes)
- CNC Retrofit
- Troubleshoot.