

PLC SCADA

Course Contents:

- PLC - Programmable Logic Controller
- SCADA - Supervisory Control and Data Acquisition
- HMI - Human Machine Interface
- DCS - Distributed Control System

PLC Course Content

- Digital Electronics Basics
- PLC Fundamentals
- PLC Hardware & Architecture
- Source & sink Concepts
- 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
- Communication with SCADA software

HMI (Human Machine Interface)

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

SCADA Course Content

- Introduction to SCADA Software
- Creating new SCADA project
- Creating & editing elementary graphic display
- Attaching controls to graphic objects
- Real time & historical trends
- Using alarms & events
- Application of scripts
- Communication with PLC
- Communication with excel
- Fault finding / troubleshooting

Motion Control (Drives & Motors)

- AC motors, operations & Limitations
- Motor Starters : DOL, Star-Delta, Auto Transformer
- Motor control circuits, interlocking circuits
- Introduction to AC drives & applications
- Criteria for drives selection

- Designing of drive control panel
- Communication with PLC, SCADA Software
- Fault finding / troubleshooting

