



Training on **PROGRAMMABLE LOGIC CONTROLLERS**

Basic | Advance

One Week Programme

Learn the skills, process and understanding of PLC's

Course Outline:

- ▶ Programmable Logic Controller (PLC) Overview
- ▶ PLC Hardware and Components
- ▶ PLC Communication
- ▶ Number Systems – Binary, Decimal and Hexadecimal
- ▶ PLC Input and Output Cards
- ▶ Relays and Relay Logic Diagrams
- ▶ PLC Programming
- ▶ Logic Gate Functions
- ▶ Motor Starter Logic
- ▶ Timers
- ▶ Counters
- ▶ Integration of PLC with Electro Actuation Systems.

Key Takeaway

- ▶ Design and build PLC schemes on their personal computers.
- ▶ Design and build PLC logic and control schemes in an industrial environment.
- ▶ Design ladder logic, function blocks and understands safe habits to work in any manufacturing unit.
- ▶ Setup Cross Communication between different types of automation equipment.

Language : English
Duration : 40 Hrs
Target Group : B.Tech pursuing Students

Programmable Logic Controller Learning Goals To learn compact, simple, powerful and low-cost CNC concepts for standard turning and milling machines To learn online & offline programming of PLC to control industrial processes Process automation is achieved by an industrial controller, PLC. Whether the process is too fast, slow, small, big, cold, hot or just too dangerous for humans, the controller makes up the brain of the entire process to schedule and control the sequence of machines. The powerful Bosch Rexroth PLC trainer system has Analog I/O which could be used to test PID loops and other variable functions. The L20 PLC controller may be connected via an Ethernet Switch with external devices, which can be used to learn the ability to program both products from a single ethernet connection. The ethernet switch has extra ports which can be used to connect additional HMIs, to demonstrate OPC connectivity to SCADA software.