INDUSTRIAL AUTOMATION WITH PLC

Learning Goals: -

The Most Used Guiding Force Behind An Automated Industrial Plant Is A "Programmable Logic Controller" Generally Known As A **PLC**. PLCs Along With Certain Other Necessary Ingredients Like Sensors, Motors, Actuators, Valves, Conveyors, Boilers, , Computers & Many More, Makes A Real Automated Manufacturing Plant.

The main objective of **PLC Workshop** is to make the aspiring engineers acquainted with the conceptual as well as practical knowledge of the Industrial Automation & latest technologies being used to achieve industrial automation. The idea of organizing this workshop is to inculcate the basic fundamentals of automation in the students and provide them with a platform to work on, In The Near Future.

Course content:-

Day 1 (Session 1)

- Presentation on Recent Trends in Industrial Automation & PLC
- Introduction To Automation
- Why We Need Automation
- Evolution In Industrial Automation (A Brief History)
- Different Type Of Industrial Control Mechanisms)
- Introduction to PLCs
- PLC Advantages over Microcontrollers
- Area of Applications
- DATA Flow During Automation
- Motor Drives Introduction & Their Need
- Sensors Introduction & Their Need
- HMI Introduction & Its Need

Day 1 (Session 2- Practical)

- Detail study of PLC
- PLC
- PLC I/Os Basics, Burning & Interfacing Concepts
- Allen Bradley & Rockwell Automation's Details

Day 2 (Session 3)

- Brief Description To Input/ Output Pins Of Micrologix-1000
- Ladder Diagram Basics
- Introduction To RSLogix
- Downloading a Ladder Program in PLC Using RSLinx.
- How To Take Input from Panel
- How To Give Output To Panel
- Running First PLC Application

Day 2 (Session 4)

- Hands on PLC Training Kit
- Participants will perform hands on PLC training Kit which contain Allen Bradley Micrologix 1000 PLC.

Duration: - 2 Days

Fees: - **1050INR+ Service Tax (per participants)**

Note- we required only 70 students in one batch only. This is because of practical work during event, it is necessary to maintain the quality.