

Industrial Automation- PLC & SCADA

Automation is basically the delegation of human control function to technical equipment. It is the use of control systems such as computers, PLCs, Microcontrollers to control machinery and processes to reduce the need for human sensory and mental requirements as well.

Industrial Automation i.e. to "Automate Industry" is the basic need of almost every type of manufacturing and production unit today. Food/ Beverage, Metal, Mining, Power, Textile, Petrochemical, Machine Manufacturing, Automobile etc are the few examples where we see the automation today.

Topics to be covered in this Workshop:

Session I: Presentation on Recent Trends in Industrial Automation & PLC-SCADA

Introduction To Automation

Why We Need Automation

Where 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

SCADA Introduction& Its Need

Session II: Detail study of PLC & SCADA

PLC

SCADA



Session III: PLC I/Os Basics, Burning & Interfacing Concepts

Allen Bradley & Rockwell Automation's Details

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.

Session IV: Hands on PLC Training Kit

Participants will perform hands on PLC training Kit.

By the end of this workshop the students will become aware about the basic Knowledge of Industrial Automation, PLCs and their relevant module.

Eligibility Criteria : This workshop is best suited for those who are interested in knowing about the fundamentals of Industrial Automation. All Electrical, Electronics, Electronics & Instrumentation, Chemical, and Instrumentation & Control Engineering Student can join this workshop.

Duration: The duration of this workshop will be two consecutive days, with eight hour session each day in a total of sixteen hours properly divided into theory and hands on sessions.

Fees: Rs. 1200/- (inclusive of all Taxes) per participant.

