

**INDUSTRIAL AUTOMATION**  
**Programmable Logic Controller**  
**(36h)**

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**Who should attend:**

Technicians, Supervisors, Engineers and Designers, who are involved in the design/operation of PLC, HMI & SCADA in industrial automation.

**Prerequisite:**

Knowledge to Hardwire logic or basics of Electronics + electrical equipments will be a plus.

**How will benefit:**

This 36-hour training program provides participants with hands-on experience in the troubleshooting, maintenance & programming of the SIEMENS family of tools. Hardware and software troubleshooting techniques are heavily emphasized throughout the course.

- ✓ Complete understanding of PLC based Hardware & Software tools for new development & system alteration
- ✓ Downtime reduction in case of emergency problems
- ✓ Complete Understanding of the Plant Operation
- ✓ Prepared hands on for fault removal and maintenance tasks & many more

**Objective:**

Hands on application course focuses on the design/operation level of Siemens PLC.

**Contents:**

Main Topics covered during training sessions.

**SECTION 1**

Introduction to Programmable Controllers

Number Systems and Codes

Logic Concepts

**SIEMENS Tools**

- ✓ Introduction to software tools by SIEMENS
- ✓ MicroWin installation
- ✓ Introduction to MicroWin
- ✓ Quick Project

**SECTION 2**

**COMPONENTS AND SYSTEMS**

Processors, the Power Supply, and Programming Devices

The Memory System and I/O Interaction  
The Discrete Input/Output System  
The Analog Input/ Output System  
Special Function I/O and Serial Communication Interfacing

### **SECTION 3**

#### **PLC PROGRAMMING-A**

The IEC 1131 Standard and Programming Language  
Programming Languages

#### **PLC PROGRAMMING-B**

Short Programming Examples  
PLC System Documentation

### **SECTION 4**

#### **INSTALLATION AND START-UP**

PLC Start-Up and Maintenance  
System Selection Guidelines

#### **Available software/hardware tools during training session**

- ✓Microwin
- ✓SIEMENS PLC
- ✓Simulator based Factory Setups
- ✓Technical Manuals
- ✓Theoretical booklet covering/explaining all the topics covered in training session

#### **FOR REGISTRTION & INFORMATION:**

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