



REALIZE YOUR POTENTIAL EMPOWER YOUR CAREER

Why? The Need

Control systems are at the heart of industries and utilities managing their operations and impacting productivity. These Control technologies are becoming more complex and more connected. Control Engineers and technicians are being under pressure like never before. The systems they must design, operate and maintain require more diverse skillset and knowledge.

Automation Lab's aim is to address these challenges through learning and education. Capitalizing on our vast industry experience, coupled with our strong relationship with well know Automation and SCADA brands, we commit to deliver our students the needed skillset and tools to excel in their Control Projects.

Who We Are?

AUTOMATION LAB delivers industry oriented Instrumentation, Automation and SCADA training courses for institutions and individuals.

The courses are delivered by well experienced trainers having extensive knowledge in designing and deploying proven Automation & SCADA systems for different market sectors using multiple Control brands and platforms.

Why Automation Lab?



The courses are sponsored by:



The courses are powered by:





Industrial Automation Systems Foundation (Code: PLC001)



Objectives

- Understand the principles of operation of a PLC
- Be able to identify and select the different components of a PLC system
- Understand the different data types to be used in a PLC program
- Understand how field devices are wired to different I/O Modules
- Understand the different PLC programming languages

Target Audiences

- Consultants
- System Integrators
- Electrical Engineers
- Automation Engineers
- Mechanical Engineers
- Maintenance Engineers
- Electrical and Control technicians
- Electrical and Automation engineering students

Prerequisite Knowledge

- Basic knowledge of control logic

Duration and Delivery

- 24 hours course
- Delivery in classroom for individuals or on premises for corporates
- **50% special discount for April and May.** Original Price is 800 USD. **Current price is 400 USD.**

Certificates

- Certificate of attendance will be delivered to all attendees at the end of the course.
- Professional Certificate of Competency in Automation and SCADA systems will be delivered to all attendees who have completed the following courses: PLC001, PLC002, PLC003 & SCADA001

Content

- Overview of automation systems components
- Block Diagram of a typical PLC
- Different PLC Classes
- Different types of Input / Output modules
- Memory types
- PLC Scan cycle
- Wiring strategies
- Overview of PLC programming languages
- Introduction to the ladder logic language
- Basic PLC Instructions
- Timers and counters
- Register and math instructions
- Practical Applications

Training and Teaching method

- Handouts including learning book and exercises papers
- Practical exercises using TwinCat3 software
- Maximum 12 participants per session