

4 Days Programmable Logic Controller Training

Course Code : AT 4209



Course Length (Days)	Taught Hours	Practical Content (%)	Theoretical Content (%)
4	28	50	50

TARGET AUDIENCE

This course is designed for electrical personnel working with equipment controlled by Programmable Logic Controller on Trident 9. The individual must have basic knowledge of electrical control components such as relays, sensors, analogy measuring devices, etc.

COURSE OUTLINE

This Program covers the operation of the programmable logic controller interfacing to equipments. Practical training will be conducted with Programmable Logic Controllers. The candidates will practice connecting the laptop to the PLC for troubleshooting purpose. The course will also provide in-depth explanation and software orientation into the Rack Phase Difference Control System, Compressor System, EMD system, Water Tight Door system and the Top Drive System.

COURSE OBJECTIVES

The course increases candidates' knowledge of the operational practice of PLC system by exposing them to practical scenarios in a realistic environment. It will increase fault finding and problem solving skills in PLC systems thereby increasing the candidates' confidence in handling PLC system.

COURSE CONTENT

Theory Components

- **Programming Logic Control (PLC)**
 - Introduction to PLC
 - Basic Architecture of PLC
 - Modules of GE Fanuc PLC
 - GE Genius bus
 - Modules of Siemens PLC
 - Profibus System
 - Modules of Rockwell PLC
- **Ladder Programming**
 - Introduction to GE Proficy ME Programming Tool
 - Introduction to Siemens Simatic Manager and Microwin
 - Introduction to AB RSLogix5 and RSLogix500
- **Rack Phase Difference Control System**
 - Introduction to RPD
 - RPD System overview and components
 - Software structure of the control system
 - High Speed counter in RPD measurement
 - Motor current/power monitoring
- **Compressor System and Water Tight Door System**
 - Introduction to AB SLC5 series PLC
 - Fault Diagnosis and Resetting

- **EMD System**
 - Introduction to Siemens S7-200 series PLC
 - Fault Diagnosis and Resetting
- **Top Drive System**
 - Introduction to Siemens S7-300 series PLC
 - Fault Diagnosis and Resetting

Practical Components

- **Simple Programming Tutorial**
 - Programming a traffic light control system
- **Maintenance**
 - Replacing modules
 - Verify module health
 - Download program to PLC
 - Backup program from PLC
- **Troubleshooting**
 - PLC communication via laptop
 - System fault reading

DELIVERY

Teaching aids, apparatus, slides, videos, practical demonstrations, questionnaires, theory and practical assessments.

CERTIFICATION

ATTS Certificate of Attendance

Minimum Number Of Delegates Required Per Event

3

Times Of Training

08:30 to 17:00

Venue

28B Penjuru Close, #01-06, Singapore 609130

Special Requirements

Delegates are required to carry/bring their own personal protective safety equipment.

Dates And Prices

- Check with the course administrator