

# INSTRUMENTATION & ELECTRONIC COURSES

## PROGRAMMABLE LOGIC CONTROLLER (PLC) (IE44B)

**OBJECTIVE:**

To provide trainees with knowledge of PLC in the control process, programming, maintenance and troubleshooting with practical applications.

**WHO SHOULD ATTEND?**

Electronic and industrial control engineers, instrumentation engineers, technicians, and instrumentation technicians.

**COURSE CONTENT:**

- Introduction
- Appreciation of Control Program Types and Application
- Arithmetic Instructions; BCD, Addition and Subtraction
- Counters, Timers, and Flip-Flop Types and Functions
- PLC Program Structure
- Ladder Language
- Special Instructions and Shift Register
- PLC System Installation, Start-Up and Commissioning
- Practical Exercises in Wiring-Up Circuits and Simple Programming
- Fault Diagnosis and Troubleshooting
- Process Control
- Use of Training Simulator (The MIL Equipment) for Programming and Fault Diagnosis Exercises.

**Duration: 10 Days**

Date:	Venue:	Cost:
Feb 21-Mar 4	Dammam	SR 14,000
Aug 8-19	Jubail	SR 15,000
Dec 19-30	Dammam	SR 14,000

## READING OF ELECTRONIC DRAWING (IE47A)

**OBJECTIVE:**

Upon completion of this course the participants should be able to understand electronic blueprints, symbols, simple and detailed drawings, diagrams and schematics of the electronic circuits.

**WHO SHOULD ATTEND?**

All technical personnel who required reading and interpreting blueprints of electronic process engineering, production, inspection and maintenance.

**COURSE CONTENT:**

- Electronic Circuits
- Electronic Components
- Analog Circuits
- Digital Circuit Basics
- Terminology and Symbols
- Basic Ladder Logic Diagrams
- Interpret Simplified Diagrams
- Points of Measurement
- Conceptual Diagrams
- Using Diagrams Tracing for Troubleshooting
- Case Studies

**Duration: 5 Days**

Date:	Venue:	Cost:
Mar 28-Apr 1	Dammam	SR 7,000
Jun 27-Jul 1	Abha	SR 8,000
Sept 26-30	Dammam	SR 7,000