

# INSTRUMENTATION & ELECTRONIC COURSES

## PLC SIEMENS S7 ELEMENTARY (IE30A)

**OBJECTIVE:**

This course provides the understanding of PLC Siemens S7 on different types, selection, installation, addressing, networking and maintenance.

**WHO SHOULD ATTEND?**

This course is recommended for instrumentation engineers and highly qualified technicians in the instrumentation field.

**COURSE CONTENT:**

- Introduction
- S7 Components
- PLC S7 Lay outs
- S7 Installation and Wiring
- General Rules and Regulations for Operating S7
- Addressing and Networking
- Configuring a Network
- Commissioning and Start-UP
- Connecting a Programming Device (PG) to S7
- Inserting a Memory Card
- Maintenance
- Troubleshooting

**Duration: 5 Days**

Date:	Venue:	Cost:
<b>Feb 21-25</b>	<b>Dammam</b>	<b>SR 8,000</b>
<b>May 9-13</b>	<b>Jubail</b>	<b>SR 9,000</b>
<b>Nov 21-25</b>	<b>Dammam</b>	<b>SR 8,000</b>

## PNEUMATIC CONTROL VALVES, ACTUATORS and POSITIONERS (IE35B)

**OBJECTIVE:**

This course is to provide the participant with principle knowledge of the main components, operation and maintenance of the pneumatic control system.

**WHO SHOULD ATTEND?**

Engineers and technician's who work in the field of pneumatic and hydraulic control systems.

**COURSE CONTENT:**

- Introduction to Fluid Power
- Physical Properties of Hydraulic Oils
- Losses in Valves and Fittings
- History of the Pneumatic and Hydraulic Controls
- Advantages of the Pneumatic and Hydraulic Controls
- Applications of the Pneumatic and Hydraulic Controls
- Pneumatic and Hydraulic Conductors and Fittings
- Theoretical Principles of Pneumatic and Hydraulic Circuits
- Components of Pneumatic and Hydraulic Circuits
- Manual and Electrical Pneumatic and Hydraulic Circuits.
- Pneumatic and Hydraulic Actuators
- Positional Control
- Pressure Measurements
- Pneumatic and Hydraulic Symbols
- Pneumatic and Hydraulic Control Valves, (Directional, Pressure and Flow Control Valves)