

# INSTRUMENTATION & ELECTRONIC COURSES

## DIGITAL LOGIC CIRCUITS AND APPLICATION (IE29A)

**OBJECTIVE:**

To improve the understanding of digital circuit phenomena and applications in automation systems.

**WHO SHOULD ATTEND?**

This course is aimed at anyone involved with digital logic circuits and application in automation systems for engineers and highly qualified technicians.

**COURSE CONTENT:**

- Introduction
- Circuit Analysis and Design
- Flip Flops and Shift Registers
- Flip Flop Applications
- Timers and Counters
- Clocks
- D/A and A/D Conversion
- Digital to Analog Conversion Different Methods
- Digital Circuit Applications in Automation
- Sequential Control and Programming

**Duration: 5 Days**

Date:	Venue:	Cost:
Jan 31-Feb 4	Dammam	SR 7,000
May 23-27	Jubail	SR 8,000
Oct 31-Nov 4	Dammam	SR 7,000

## DISTRIBUTED CONTROL SYSTEM (DCS) (IE13AE)

**OBJECTIVE:**

To improve the understanding of what DCS is and its application in automation systems.

**WHO SHOULD ATTEND?**

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

**COURSE CONTENT:**

- What is DCS
- DCS fundamentals
- DCS architecture and hardware system
- Field/DCS wiring diagram
- Digital input/digital output modules
- Interface module
- Graphic displays
- Control loop tuning display
- DCS wiring diagrams and troubleshooting

**Duration: 5 Days**

Date:	Venue:	Cost:
Feb 28-Mar 3	Dammam	SR 7,000
Jun 27-Jul 1	Abha	SR 8,000
Sept 26-30	Dammam	SR 7,000