Automatic control devices Course

DURATION

3 Days

PARTICIPANTS

Facilities and Project Engineers as well as newly graduated Electrical, operation, Controls and Instrument Engineers who need to improve their basic understanding of instrumentation and control systems within oil and gas facilities.

YOU WILL LEARN

The instrumentation course involves an extensive understanding of current loops and the devices typically found on them. Candidates look in detail at the devices used to measure temperature, pressure, level and flow, and briefly at control valves, Pressure relief and pressure regulation; In addition to a short introduction to SCADA, PLC, DCS and SIS.

- How to document instrumentation including tag numbers, P&IDs, loop and logic diagrams
- Field measurement devices including level, pressure, temperature and flow
- Final elements and actuators including control loops, control valves, shutdown valves, actuators, transducers
- Pressure relief and pressure regulation
- Process control basics with emphasis on control loops, types, strategies, and loop tuning
- How programmable logic controllers operate as well as their advantages, application, functionality, architecture, and programming
- Supervisory Control and Data Acquisition (SCADA) Systems to include telemetry, RTUs, internet and web based
- Distributed Control Systems (DCS) including Fieldbus and Profibus
- Risk mitigation, technologies, and architecture of Safety Instrumented Systems (SIS)
- The best practices for hazardous areas and equipment selection which will include area classification, NEC, IEC, equipment protection, selection, certification, location, and ingress

Address: 27 Orabi St, Office (706)
El-Azbakia, 11111-Cairo.
Tel: +20 2 25763462.
Fax: +20 2 25763463.

العنوان: ٢٧ ش عرابى، مكتب (٧٠٦)
الازبكية، ١١١١١- القاهرة.
تليفون: ٢٥٧٦٣٤٦٢ ٢ (٢٠)
فاكس : ٢٥٧٦٣٤٦٣ ٢ (٢٠)

COURSE CONTENT

- Fundamentals
- Instrumentation documentation
- Field measurement devices
- Final elements and actuators
- Pressure relief and pressure regulation
- Control system basics
- Control valves
- Programmable logic controllers
- Supervisory control and data acquisition (SCADA) systems
- Distributed control systems (DCS)
- Safety instrumented system (SIS)
- Hazardous areas and equipment selection

Address: 27 Orabi St, Office (706)
El-Azbakia, 11111-Cairo.
Tel: +20 2 25763462.
Fax: +20 2 25763463.

العنوان: ٢٧ ش عرابى، مكتب (٧٠٦)
الازبكية، ١١١١١- القاهرة.
تليفون: ٢٥٧٦٣٤٦٢ ٢ (٢٠)
فاكس : ٢٥٧٦٣٤٦٣ ٢ (٢٠)