

**COURSE TITLE :**  
**INDUSTRIAL PROCESS CONTROL & INSTRUMENTATION**

**COURSE OVERVIEW/COURSE BRIEF**

This course is to provide participants with the theory and practical in the control aspect specifically in Industrial Process Control. The programme will start with measurement system and measurement technique for temperature, fluid flow and level. Measurement equipment such as Vortex, ultrasonic flow meter and Venturi weir will be used in the practical. Feedback control, Cascade, Feedforward, on-off and PID topic will be covered in theory and practice. Participants can participate in controlling the valve, actuators and positioners using PID diagram.

**COURSE OBJECTIVES**

Upon completion of this course, participants will be able to :

- Describe the control principle in the Industrial Process System application.
- Perform the measurement for temperature, pressure, fluid flow and level.
- Tune the PID with the right technique for optimization of the system.

**THE UNIQUENESS OF THIS COURSE**

- Use of authentic industrial equipment and instrument and UUT in practicals.
- Calibration techniques performed using various industry equipment
- Exposure to the ISA and ISO Calibration Standard.
- Industry-experienced trainers

**WHO SHOULD ATTEND**

This course is designed for those related to the area of instrumentation and control as well as in education line. Target Group: Engineers, Technicians, Lecturers and Technical Teachers.

**KEY TOPICS**

- ▶ Instrument & Process Measurement.
- ▶ Thermometer & Thermocouple Measurement of Temperature.
- ▶ Measurement of Fluid Flow
- ▶ Measurement of Level with direct and indirect technique.
- ▶ Control – Cascade, feedback
- ▶ P&I Drawing and Symbols

**METHODOLOGY**

Lectures and practical exercises

**COURSE DURATION**

5 Days /40 Hours

**PRE-REQUISITE**

- Basic Electrical, Electronics, Process Control and Instrumentation.

**CERTIFICATION**

Certificate of attendance will be issued to those who fulfill 80% of attendance.