# PROCESS MEASUREMENT & CONTROL APPRECIATION

Course Code PMCA Duration 5 days Max Class Size 15

Prerequisite None

The course is designed to provide participants with the basic knowledge of automatic process measurement and control.

#### Who should attend this course?

For operators, technicians and new engineers who want to learn the principles of process measurement and control.



# Day 1

Basic principles of process measurement and automatic control

Terminology and symbols

Pressure measurement : terminology, working principles of various pressure sensing devices Level measurement : working principles of different level sensing devices Laboratory work : Calibration of pressure transmitter

### Day 2

Temperature measurement : terminology, working principles of temperature detectors Flow measurement : terminology and working principles of flow measuring devices Laboratory work : Calibration of temperature transmitter

Introduction to Fieldmate as a commissioning tool

# Day 3

Analytical measurement : principles of pH and conductivity measurement Final control element and valve positioner Principles of current to pneumatic converter Introduction to Wireless Field Devices Laboratory work : Calibration of Wireless Pressure Transmitter Stripping and assembly of valves

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# Day 4

Process characteristics Modes of control Laboratory work : Process characteristics, controller action – open loop

### Day 5

Controller tuning Laboratory work : PID control response; optimum PID setting