

PROCESS MEASUREMENT & CONTROL APPRECIATION

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

Course Code PMCA

Duration 5 days

Max Class Size 15

Prerequisite None

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