Process Instrumentation
Fundamentals of Pressure, Temperature and Valve Positioners

General Information
Course Code:  PIA-PRPTVC1A
Length:  1 Day

Audience
This introductory course is intended for technical individuals responsible for routine maintenance and calibration of field instrumentation. Additionally, sales representatives responsible for selling and specifying these technologies will benefit from this class.

Profile
This course covers basic theory, applications, and configuration of field instrumentation.
Pressure technologies will cover the entire Siemens portfolio, focusing on the SITARANS P DSIII/P410.
Temperature technologies covered will include sensor and transmitter options in the SITRANS T family.
Valve positioner technologies will focus on the SIPART PS2, also covering general valve, actuator, and positioner types.

Objectives
Upon completion of this course, the student shall be able to:
- Understand different pressure measurement types and apply them correctly
- Configure a SITTRANS P DSIII pressure transmitter in the field
- Recognize different temperature sensor types and technologies
- Program a SIPART PS2 for the selected application

Topics
1. Pressure measurement
   a. Theory
   b. Transmitter construction
   c. Transmitter/transducer portfolio
   d. Basic Applications
   e. Programming and configuration
2. Temperature measurement
   a. Theory
   b. Sensor/transmitter construction
   c. Applications
3. Valve Positioners
   a. Introduction to valves and actuators
   b. Positioner theory and construction
   c. Applications and mounting
   d. Initialization and configuration