





PROCESS INSTRUMENTATION LAB

NITW SIEMENS CENTRE OF EXCELLENCE, NIT WARANGAL

Course Name: Process Instruments hands-on with SIMATIC PDM

Course Duration: 40 Hrs.

Course overview:

- Intended Audience:
 - This course is suitable for Automation, Instrumentation, Electrical, Electronics, mechatronics Engineers.
- Prerequisites
 - <u>Education</u>: Diploma or B.E/B.Tech 2nd year completed in any one of the following streams.
 - Software: There are no prerequisite for this training
- Course objectives
 - o After successfully completing this course you should be able to:
 - Understand the working and communication of the process instruments
 - Parameterize the instruments from Local and remotely
 - Configure the instruments in the Hardware Configuration in PCS7

• Course contents

- 1) Pressure Transmitter (8 hrs.)
 - a. Overview of the various pressure measurement technologies
 - b. Overview of the Siemens make pressure measurement portfolio
 - c. Unique features of Siemens make pressure transmitters
 - d. Hands on training for configuration, and commissioning
- 2) Temperature Transmitters (8 hrs.)
 - a. Overview of the various temperature measurement technologies
 - b. Overview of the Siemens make temperature measurement portfolio
 - c. Unique features of Siemens make temperature transmitters
 - d. Hands on training for configuration, and commissioning
- 3) Electro-pneumatic Positioners (8 hrs.)
 - a. Overview of the Siemens make Electro-pneumatic Positioners
 - b. Unique features of Siemens make Electro-pneumatic Positioners
 - c. Hands on training for configuration, and commissioning.
- 4) Level Transmitters (8 hrs.)
 - a. Overview of the various level measurement technologies
 - b. Overview of the Siemens make level measurement portfolio (Ultrasonic, Radar, Capacitance)
 - c. Unique features of Siemens make level transmitters
 - d. Hands on training for configuration, and commissioning
- 5) Flow Transmitters (8 hrs.)
 - a. Overview of the various flow measurement technologies
 - b. Overview of the Siemens make flow measurement portfolio (Mag Flow, Mass Flow, Ultrasonic Flow)
 - c. Unique features of Siemens make flow transmitters
 - d. Hands on training for configuration, and commissioning