



ANDHRA PRADESH STATE
Skill Development Corporation



SIEMENS

Process Instrumentation Laboratory

Measurement of flow, Level, Pressure and Temperature with the help of process instruments and Manual Parameterization, Parameterization through software (Simatic PDM) are basic capabilities of PI lab.

Features of the Laboratory

- ❖ This Laboratory is equipped with Pressure Transmitter (SITRAIN P300), Differential Pressure Transmitter (SITRAIN PDS-111), Temperature transmitter (SITRAIN TH400), Flow Transmitters (SITRAIN Mass 6000, SITRAIN Mag 5000 and SITRAIN FUS 060), Level Transmitters (SITRAIN LR250, SITRAIN LU and SITRAIN CLS 200), Valve Actuator (SITRAIN PS2) and Distributed Control System (Siemens PCS-7)
- ❖ This Laboratory is fully integrated With Electronic, Electrical, Chemical and Process instrumentation applications.

Significance of the Laboratory

- ❖ Understand PCS7 hardware & software)
- ❖ Configure a typical project & Multi Project
- ❖ Program using STEP7 editors like CFC charts
- ❖ Understand and use of SFC
- ❖ Operator control & monitoring using WinCC
- ❖ Communications between the S7 and WINCC
- ❖ PCS7 tag database
- ❖ Building WinCC screens
- ❖ Learn the principles of flow, Level, Pressure, Temperature measurement
- ❖ Identify the components and performance characteristics of Different Process Instruments
- ❖ Obtain and understand the principle of operation, selection and sizing of various Process Instruments
- ❖ Learn specifications, range, hardware / constructional details and features of the product
- ❖ Parameterize different Process Instruments for different configurations.