Process Instrumentation
Midstream Gas

Course #: PIA-PROGGC1A

CEU Credits: TBD

Course Title: Midstream Gas

Description:
This course will provide students with knowledge to enable specification, application, and installation of Siemens process instruments utilized in midstream Natural Gas applications. With a combination of Theory, detailed description, and hands on labs the students will gain a working understanding of flow, pressure temperature, level and valve positioner technologies and how they apply to their applications. The course will review the processes and challenges faced in midstream applications and the solutions Siemens process instrumentation provide to meet these challenges. Subjects include basic theory of operation, detailed application review, installation and commissioning considerations for Siemens flow, level, pressure, temperature, and valve positioner technologies. The training will be reinforced with comprehensive hands-on lab exercises on all products.

Objectives
- Perform basic installation and commissioning of a range of Siemens process instruments
- Understand the capabilities of each product variant and where to apply which model for optimum performance
- Identify applications that may benefit from utilization of Siemens process instrumentation

Outline:
1. Midstream Gas process overview
   a. Stages
   b. Industry requirements
   c. Challenges
   d. Siemens applicable Instruments
2. Detailed Review of Midstream Stages
   a. Compressor Stations
   b. Metering Stations
   c. Valve Stations
   d. Glycol Dehydration Unit / Reboiler
   e. Glycol Storage
   f. Pumpline Sump
   g. Amine Gas Treatment Unit
   h. Pig Launcher / Receiver
   i. Pipeline Terminals
3. Product-Specific Tutorials & Hands-On Labs
   a. P500, DSIII Pressure sensors / transmitters
   b. TH300, TH500 Temperature Sensors
   c. SiPart PS2 Valve Positioner
   d. CLS200, CLS300 cap. level
   e. LG250, LR250 Radar Level
   f. FC430 Coriolis Flowmeter
   g. FUG/FUT1010 Clamp-on flowmeter