



Automation, Instrumentation, Measurements, and Process Control

This course provides the participants the theoretical and practical knowledge to apply and use the automation technologies as a fundamental factor to increase operational efficiency and production process productivity. It also contains the concepts and principles of measuring, instrumentation and process control as key elements for the automation of hydrocarbon production process

Audience

This course is intended for individuals working as production and surface facility engineers to increase the understanding of the automation, instrumentation, measurement and process control

Course Agenda

- Day 1**
- Subsurface surface automation concept
 - Automation Pyramid
 - Process Control
 - Centralized Control
 - Optimization
 - Integration
 - Telecommunication
 - Key Factors
 - People-Process-Technology
 - Quantification of value creation
- Day 2**
- Opportunities identification to add value using subsurface-surface automation technologies.
 - Improvement on Differed production
 - Production optimization in line
 - Operational cost optimization
 - Improvement on the percentage to access reserves
- Day 3**
- Examples of typical solutions of subsurface-surface automation system and potential benefits
 - In line Measurements in surface facilities
 - Fluids measurements and custody transfer
 - Automated well test
 - Artificial lift automated control
 - Bottomhole sensors
 - Conscious well
 - Monitoring and diagnosis applications
 - In line optimizers
 - Diagnosis and optimization integrated system
- Day 4**
- Technological solutions
 - Common Platform
 - Specific Platform
 - Standards and recommended practices
 - Typical solutions
- Day 5**
- Analysis of practical cases