

TRAINING SYLLABUS

Introduction to SPP&ID

- Overview of SPP&ID
- Navigating the Software
- Utilizing Drawing Manager & Smart P&ID
- Connecting to the Database
- Interpreting Drawing Icons
- Customizing Drawing Manager
- Creating New Drawings
- Using Drawing Properties
- Exploring the Legend Sheet

Practical Sessions

- Overview of Design Window, Property Window, Catalogue Explorer, and Engineering Data Editor
- Customizing Icons for Efficient Workflows
- Inserting P&ID Border Templates
- Placing Symbols/Items on the Grid
- Adding Equipment and Equipment Components
- Understanding Equipment Properties
- Labeling Equipment & Equipment Components
- Routing Lines and Using Segment Breaks
- Placing Piping Components

- Working With OPC's (Off Page Connector)
- Adding Pipe Runs & Piping Component Labels
- Exploring Pipe Run Properties
- Placing Instruments & Signal Lines
- Understanding Instrument Properties
- Labelling Instruments
- Working With Assemblies
- Utilizing Auxiliary Graphics
- Applying Display Sets
- Performing Consistency Checks
- Generating Plant Reports & My Reports
- Printing Drawings in Various Formats
- Hands-on Practice Session on P&ID drafting

Hands-On Project

- Create a complete P&ID for a specific plant system (e.g., chemical processing, power generation, oil & gas).
- Include equipment, piping, instrumentation, and control systems.
- Implement P&ID drawing standards, symbols, tags, and reporting.



Project Presentation

- Present your final project to demonstrate your proficiency in using SmartPlant P&ID.
- Discuss design choices, report generation, and integration with other tools (e.g., Smart 3D, Smart Materials).

Tools and Technologies Covered:

- **SmartPlant P&ID (SPPID):** Core software for P&ID design and data management.
- **Smart 3D:** Integration with 3D plant design.
- **Smart Materials:** Integration for material management.
- **SmartPlant Foundation (SPF):** For data management and collaboration.
- **Microsoft Excel:** For report generation and data management.

Learning Outcomes:

By the end of this course, students will be able to:

- Create and manage P&ID drawings using SmartPlant P&ID (SPPID).
- Integrate P&ID data with other SmartPlant applications like Smart 3D.
- Generate reports, bill of materials (BOM), and documentation.
- Implement data management practices, ensuring consistency and accuracy across the design.
- Utilize quality control tools to validate and review P&ID designs.
- Work effectively in collaborative and multi-disciplinary project environments