

AVEVA Diagrams User and Administration

Course Objectives

- Develop user-level expertise in creating intelligent P&IDs using AVEVA Diagrams.
- Train participants to manage administration settings and project standards.
- Enable creation of custom symbols, stencils, and reporting templates.
- Build knowledge of auto-naming systems and engineering data consistency.
- Prepare learners for real project implementation in process industries.

Course Outcomes

- Create and modify intelligent engineering diagrams efficiently.
- Configure and administer AVEVA Diagrams project settings.
- Design custom symbol libraries and reusable stencils.
- Generate reports and maintain data integrity.
- Independently support both user and admin activities in projects.

Target Audience

- Process Engineers
- Piping Designers
- CAD Draftsmen
- Engineering Document Controllers
- AVEVA Administrators
- EPC Project Teams

Course outline

The course comprises **40**-hours of theory and labs and is divided into **15** different Modules. Each chapter will be followed by hands-on lab exercises to reinforce learning and gauge understanding of the topics covered.

Table of Contents

Module 1: Introduction to AVEVA Diagrams

- Overview of AVEVA Diagrams 14.1.4
- Application scope and industry usage
- Interface navigation and workspace setup

Module 2: Standard User Functions

- Standard MS Visio features in AVEVA Diagrams
- Drawing controls and page setup
- Layers, alignment, and formatting tools

Module 3: Creating Intelligent P&IDs

- Creating a new P&ID
- Using templates and engineering standards
- Smart object placement and tagging

Module 4: Equipment Placement & Compare/Update

- Placing equipment objects
- Compare & Update functionality
- Synchronizing engineering database changes

Module 5: Nozzles and Piping Components

- Adding CES nozzles
- Adding metric nozzles
- Connecting equipment nozzles to pipelines

Module 6: Pipeline Creation & Auto Naming

- Creating pipelines
- Pipeline numbering systems
- Auto-renaming concepts and setup

Module 7: Valves, Fittings & Bore Selection

- Tee / OLET placement
- Standard and special valves
- Leave bore / Arrive bore / Branch bore settings

Module 8: Instruments & Loops

- Instrument placement
- Smart tags and symbols
- Creating instrument loops

Module 9: Notes, Holds & Revision Control

- Intelligent notes and holds
- Managing revisions
- Change tracking and issue control

Module 10: Validation & Reports

- Inconsistency check reports
- Error resolution workflow
- Report generation basics

Administration Modules

Module 11: AVEVA Diagrams Admin Overview

- Admin module structure
- Project settings and configuration
- Managing standards and libraries

Module 12: Symbol & Stencil Creation

- Creating custom symbols
- Building stencil libraries
- Symbol standards management

Module 13: System Creation & Maintenance

- Creating systems definitions
- Assigning systems to drawings
- Maintaining engineering consistency

Module 14: Auto-Naming Administration

- Naming rules setup
- Tag conventions
- Maintaining numbering sequences

Module 15: Reports & Templates Administration

- Creating report templates
- Editing output formats
- Managing project reports