Autodesk AutoCAD Plant 3D Admin Training Course

Course Overview

Course Length: 16-Hours

- 16-Hours – 4 x 4-hour training sessions
- Remote training over MS Teams
- Sessions are recorded and download links for each session are provide for future use
- Training for up to 1-3 People
- Sessions can start within 7 days upon ordering
- Flexible sessions (i.e. consecutive or Monday, Wednesday, Friday, etc.)
- Courses are private and topics can be customised to suit
- Includes Certificate of Completion

This Autodesk AutoCAD Plant 3D training course is designed to take you from project setup through to producing coordinated P&IDs, 3D piping models, and deliverables such as orthographic and isometric drawings. You will learn practical, industry-aligned workflows for modelling equipment, structures and piping, managing project data, and generating reports—while working in a guided, hands-on environment that can be tailored to your standards and project needs.

Topics Covered

- Understanding the purpose of Building Information Management (BIM) and how it is applied in the Autodesk Revit software.
- Navigating the Autodesk Revit workspace and interface.
- Working with the basic drawing and editing tools.
- Starting a project based on Autodesk Revit models.
- Creating and modifying basic topography.
- Using Site Designer tools to modify topography with soft terrain features, sidewalks and kerbs.
- Adding retaining walls, hardscape, stairs and other building elements.
- Placing components for plantings, furniture, and lighting.
- Setting up sheets for plotting with text, dimensions, details, tags, and schedules.
- Creating details.

Prerequisites

- Basic understanding of 2D drafting concepts and Windows file management.
- AutoCAD fundamentals (selection, snaps, layers, properties, and basic editing) are recommended.
- Access to AutoCAD Plant 3D (installed and licensed) and a stable internet connection for remote sessions.
- Optional: Prior exposure to P&ID conventions will help but is not required.

Training Guide Contents

Chapter 1 – Managing Projects with Project Manager

- Introduction to Plant 3D Project Manager
- Creating, opening and managing projects
- Understanding project folder structures
- Managing drawings and project files
- Adding, removing and organising drawings
- Managing drawing dependencies and references
- Project backup and restoration

Chapter 2 – Project Setup and Drawing Settings/Templates

- Understanding Plant 3D project settings
- Creating and configuring project templates
- Configuring drawing properties and settings
- Setting up project directories and file naming conventions
- Configuring units, layers and drawing standards

Chapter 3 – Orthographic Drawing Configuration

- Configuring orthographic drawing settings
- Creating and customising orthographic templates
- Setting up drawing views and annotations
- Configuring dimensions, layers and display settings
- Customising orthographic title blocks

Chapter 4 – Isometric Drawing Configuration

- Understanding isometric styles and configuration
- Configuring isometric drawing templates
- Customising isometric title blocks
- Configuring annotations, dimensions and symbols
- Setting up bill of materials (BOM) and material lists
- Managing isometric output settings

Chapter 5 – Tag Formats and Customising Annotations

- Understanding Plant 3D tagging conventions
- Creating and modifying tag formats
- Configuring automatic tagging rules
- Customising annotation styles and formats
- Configuring equipment, piping and instrumentation tags
- Managing tag uniqueness and validation

Chapter 6 – Plant 3D Class Definitions and Properties

- Understanding Plant 3D class structures and inheritance
- Creating and modifying class definitions
- Adding custom properties to Plant 3D objects
- Configuring property types and default values
- Managing property mappings and acquisition rules
- Configuring property visibility and display settings

Chapter 7 – Introduction to Spec and Catalog Editor

- Understanding the relationship between specifications and catalogues
- Navigating the Spec and Catalog Editor interface
- Understanding component families and sizes
- Managing existing specifications and catalogues

Chapter 8 – Creating and Modifying Catalogues

- Creating custom piping catalogues
- Adding and modifying component families
- Managing component dimensions and properties
- Configuring material specifications and pressure ratings
- Importing and exporting catalogue data
- Managing catalogue updates and revisions

Chapter 9 – Creating and Managing Piping Specifications

- Creating new piping specifications
- Adding and removing components from specifications
- Configuring component sizes and material properties
- Managing end connections and joint configurations
- Updating specifications from modified catalogues
- Validating piping specifications

Chapter 10 – Part Priorities

- Understanding part selection priorities
- Configuring preferred components within specifications
- Managing multiple component options
- Setting component selection criteria
- Testing part priorities during piping placement

Chapter 11 – Creating Parametric Parts

- Understanding parametric component modelling
- Using the Plant 3D Parametric Component Builder
- Creating custom parametric piping components
- Defining dimensions and component parameters
- Configuring connection ports
- Adding custom components to catalogues and specifications

Chapter 12 – Creating Block-Based Parts

- Understanding block-based component creation
- Preparing AutoCAD 3D geometry for custom components
- Creating block-based piping components
- Defining connection ports and orientation
- Assigning component properties and metadata
- Adding block-based parts to catalogues and specifications
- Testing custom components within Plant 3D

Chapter 13 – Data Manager

- Introduction to Plant 3D Data Manager
- Navigating project and drawing data
- Viewing and filtering component properties
- Editing component data in bulk

- Exporting project data to Excel
- Importing updated data into Plant 3D
- Validating and managing project data consistency