KOENIG SOLUTIONS · COURSE OUTLINE

Advanced AutoCAD Plant 3D Administration and Optimization

Learn to administer, customise and optimize AutoCAD Plant 3D projects, from intelligent P&IDs to batch isometrics and bulk data import.

40 Hours	9	29
DURATION	MODULES	TOPICS

COURSE OVERVIEW

This course covers the administration of AutoCAD Plant 3D projects, including project setup, templates, user roles and interface navigation. It then addresses data modeling from intelligent P&IDs through equipment and piping models to isometrics, orthographics and bills of materials, followed by advanced modeling techniques, custom specifications and catalogs. Further modules cover creating custom piping parts and special supports, configuring LAN-based access control, managing project data and backups, and generating batch isometrics and reports. The course concludes with bulk data import from Excel, covering data preparation, import workflows and error resolution.

WHO THIS COURSE IS FOR

- **Plant Design Engineers and Piping Designers working on industrial projects**
- **CAD Administrators and Plant 3D Project Coordinators**
- **Mechanical Engineers involved in piping layout and equipment modeling**
- **BIM / Digital Engineering professionals managing plant design data**
- **EPC professionals seeking advanced Plant 3D administration and optimization skills**
- **Engineering students or fresh graduates aiming to build careers in plant design automation**

LEARNING OBJECTIVES

What You Will Learn

- To provide advanced knowledge of Autodesk AutoCAD Plant 3D project administration, configuration, and optimization workflows
- To develop skills in creating intelligent P&IDs, 3D plant models, and project deliverables such as isometrics and reports
- To train participants in managing project data, access controls, backups, and collaborative LAN environments
- To enable customization of piping components, specifications, catalogs, and special supports for project-specific needs
- To improve productivity through automation tools such as batch ISO generation and bulk data import from Excel

COURSE SYLLABUS

9 Modules, 29 Topics

01

Administering Plant 3D Projects

TOPICS

Project Setup & Structure · Templates & Standards Management · User Roles & Permissions · Interface Navigation & Admin Tools

02

Data Modeling Essentials – P&ID to 3D

TOPICS

Creating Intelligent P&IDs · Equipment & Piping Modeling · Linking P&ID with 3D Models · Generating Isometrics, Orthographics & BOMs

03

Applying Extended Practices in Plant 3D

TOPICS

Advanced Modeling Techniques · Custom Specifications & Catalogs · Data Organization & Project Optimization

04

Creating Custom Piping Parts

TOPICS

Custom Component Design · Spec Editor & Catalog Updates · Quality Validation of Parts

05

Designing and Integrating Special Supports

TOPICS

Pipe Support Design Concepts · Structural Integration in Plant Models · Testing & Validation

06

Configuring Access Control in Local Mode (LAN)

TOPICS

LAN Collaboration Setup · Access Rights & Security Controls · Multi-user Project Coordination

07

Data Management and Backups

TOPICS

Project Database Management · Automated Backup Strategies · Recovery & Restoration Procedures

08

Batch ISO and Report Generation

TOPICS

Batch Isometric Creation · Automated Report Publishing · Custom Report Templates

09

Executing Bulk Data Import from Excel

TOPICS

Excel Data Preparation · Bulk Import Workflows · Mapping & Error Resolution

NOTES

- Course Outcomes: By the end of this course, participants will be able to: Set up, manage, and administer AutoCAD Plant 3D projects using industry best practices; Create and synchronize P&ID drawings with 3D plant models efficiently; Configure secure user access, manage project databases, and implement backup/recovery systems; Design and integrate custom piping parts, supports, and specifications into live projects; Automate repetitive tasks such as report generation, isometric creation, and bulk data imports; Enhance project delivery speed, accuracy, and collaboration across engineering teams.

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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