

Autodesk Navisworks Essentials

Course Duration : 2 days

Course Overview

Using the functionality of the Autodesk Navisworks Review, Simulate, and Manage, this course teaches delegates how to combine 3D geometry from cross disciplines into one scene to enable effective model reviews, and run object-interference checks on 3D models.

Prerequisites

- A working knowledge of AutoCAD, Revit or similar design software
- It is recommended working knowledge of Microsoft supporting systems.

Objectives

Delegates will be able to :

- Open and append 3D files of different formats and save in the Navisworks format
- Create links to object properties files and scheduling files in external databases
- Perform visual project model reviews using the built-in review and reporting tools
- Create construction simulations of a project model to check validity of schedules
- Use Animator and Scripter to create interactive animations for presentations
- Add materials, lighting & backgrounds to project models to create photorealistic output
- Perform clash detection tests between different 3D files to check design integrity.

Course Content

Getting Started with Navisworks

Publishing, Merging, Refreshing, and Emailing Files.
Selection Tree and Selecting Objects

3D Model Review

Hiding Objects and Overriding Materials.
Objects Properties
Measuring and Moving Objects
Selection and Search Sets
Viewports
Comments, Redlining, and Tags
Animations
Sectioning
Links
Comparing Models
Navisworks Real-Time Rendering
Switchback

TimeLiner

TimeLiner Overview
Creating Tasks
Gantt View
Import Tasks from External Project File
TimeLine Simulation
Configuring and Defining a Simulation
Simulation Export



Animator

- Animator Overview
- Creating a Basic Animation
- Manipulate Geometry Objects in an Animation Set
- Section Plane Sets
- Controlling Animation Scene Playback

Scripter

- Scripter Overview
- Creating and Managing Scripts
- Creating and Configuring Events
- Creating and Configuring Actions

Quantification

- Quantification Overview
- Setting up a Quantification Project
- Item and Resource Management
- 3D Model and Virtual Takeoff
- Managing Takeoff Data
- 2D Takeoffs
- Analysing Changes
- Exporting Takeoff Data

Clash Detective

- Clash Detective Overview
- Clash Results
- Clash Test Reporting
- Working with Clash Tests
- Audit Checks
- Exporting and Importing Clash Tests
- Laser Scan Data Clashing
- Methods for Testing and Resolving Clashes
- Time-Based Clashing

AutoDesk Rendering

- Autodesk Rendering Overview
- Adding materials to a Model
- Creating and Editing Materials
- Material Mapping
- Lighting
- Sun and Sky Lights
- Exposure Control
- Ground Planes
- Photorealistic Rendering