



Autodesk Navisworks Essentials

Course Length: 3 days (24 hours)

Objectives

The objective of the Autodesk® Navisworks® Essentials instructs students in best approaches to combine 3D geometry from cross disciplines into one scene to enable effective model reviews. Through a hands-on, practice-intensive curriculum, students acquire the knowledge needed to review and markup the model, use TimeLiner, Animator, Scriptor, Quantification, Autodesk Rendering, as well as the Clash Detective tools within the Autodesk Navisworks software.

Who Should Attend

This course is designed for new and experienced Navisworks users who are looking to become more familiar with all of the main tools in Navisworks.

Prerequisites

It is recommended that students have a working knowledge of 3D design and task-scheduling software.

Notes

The indicated course length is a guideline. Topics and duration may be modified by the instructor based upon the knowledge and skill level of the participants.

Course Description

Using the functionality of the Autodesk Navisworks Simulate, and Manage features, students learn how to open, review, quantify, and run object-interference checks on 3D models. Students also learn how to link to task-scheduling files and create 4D construction simulations. Using the Animator and Scriptor tools, students create interactive animations. In addition, students learn how the Autodesk Rendering tools can help them create photorealistic images and animations.

Course Outline

Getting Started

Getting Started with Autodesk
Navisworks
Publishing, Merging, Refreshing,
and Emailing Files
Selection Tree and Selecting
Objects

3D Model Review

Hiding Objects and Overriding
Materials
Object Properties
Measuring and Moving Objects
Selection and Search Sets
Viewpoints
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
Configuring and Defining a
Simulation
Simulation Export

Animator

Animator Overview
Creating a Basic Animation
Manipulate Geometry Objectives
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 Take-off
Managing Takeoff Data
2D Takeoffs
Analyzing Changes
Exporting Takeoff Data

Clash Detective

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

Autodesk Rendering

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

