



In this course, using hands-on exercises that demonstrate the functionality of Autodesk® Navisworks®, students learn how to open, review, 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 Scripter tools, students create interactive animations. In addition, students learn how the Presenter tools can help them to create photorealistic images and animations.

Prerequisites: This course is meant for new Autodesk Navisworks Manage users for the review, 4D simulation, clash testing and presenting of existing 3D geometry files. It is recommended that you have a basic understanding of 3D design and task scheduling software. Navisworks Review owners should take this course.

Register Online: [Click here.](#)

Autodesk®
Authorized Training Center

Visit www.ideateinc.com for a complete class schedule.
Or call our Training Department at 888.662.7238.

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Course Objectives

The primary objective of this course is to teach students how to combine 3D geometry from cross disciplines into one scene to enable effective model reviews. Students also learn to use the Clash Detective, TimeLiner, Animator, Scripter, and Presenter tools competently within Navisworks.

After completing this course students will be able to effectively use the range of tools in Autodesk Navisworks for the following types of tasks:

Describe the main features and functionality of Autodesk Navisworks.

Open and append 3D files of different formats and save in the Autodesk 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 the validity of construction schedules.

Use Animator and Scripter to create interactive animations for presentations and demonstrations.

Add true-to-life materials, and lighting and backgrounds to project models, to create photorealistic output.

Perform interference detection tests between 3D files of different disciplines to check integrity of the design.

Produce photorealistic stills and animations for quick presentations and effective project/client communications without having to spend hours utilizing other software.

Effectively use the Clash Detective to perform effective, succinct and viable clash tests across multiple file types for project coordination and design review.

Create Clash Reports for in house review and construction reports.

Who Should Attend

This course is designed for new and experienced Autodesk Navisworks users who need to become familiar with its main tools.

For questions regarding Ideate training please call: 888.662.7238 education@ideateinc.com

Cancellation/Rescheduling Policy:

Students may call to cancel a reservation and receive a credit toward future training up to ten business days before the class. Training credits expire one year from the issue date. If notification is received less than ten business days before the class, the cancellation charge will be the full class tuition. Payment is due per the terms of the invoice, regardless of when the class is completed. The student agrees to Ideate's Cancellation/Rescheduling Policy with issue of purchase order or any method of payment.

Day 1**Getting Started with Navisworks**

- Workspace Overview
- Opening and Appending Files in Navisworks
- Saving, Merging, and Refreshing Files in Navisworks
- Database Support (Data Tools)

Review

- Navigation and the Navisworks Engine
- Selection Tree and Selecting Objects
- Hiding Objects and Overriding Materials
- Object Properties
- Measuring and Moving Objects
- Selection and Search Sets
- Viewpoints and Adding Comments and Redlining
- Animations, Sectioning, and Hyperlinks
- Comparing Models and SwitchBack
- Navisworks Real-Time Rendering

TimeLiner

- TimeLiner Overview
- Creating Tasks and Importing Tasks from an External Project File
- TimeLiner Simulation
- Configuring and Defining a Simulation
- Simulation Export
- Time-based Clashing and the Clash Detective Report

Animator

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

Day 2**Scripter**

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

Presenter Basics

- Presenter Overview
- Applying Materials to Model Items
- Adding Lighting Effects to a Scene
- Adding Background Effects
- Rendering Effects
- Outputting Rendered Images and Animations

Advanced Presenter Features

- Editing and Managing Materials
- Advanced Material Editing
- Ground Planes
- Individual Light Effects and Image-based Lighting
- Environment Backgrounds and Reflections
- Custom Environments
- Light Scattering
- Rich Photorealistic Content (RPC)

Clash Detective

- Clash Detective Overview
- Selecting Items to Be Clashed
- Clash-Test Settings and Rules
- Clash Results and Reporting
- Create and Save Batches of Clash Tests
- Export and Import Clash Tests
- Custom Clash Tests
- Laser-Scan Data Clashing
- Holding and Releasing Objects
- SwitchBack in the Clash Detective and Time-based Clashing