

Navisworks Advanced



Overview

Course Length: 24 - 48 hours (*can be taken via flexible schedule in-center or remotely*)

Description: This course will teach how to combine 3D geometry from cross disciplines into one scene to enable effective model reviews. Topics covered in this course are: The Navisworks Presenter Advanced Features, TimeLiner, Scripter, and Clash Detective. Users will learn how to use the Scripter to create interactive animations for presentations and demonstrations and perform interference detection tests between 3D files of different disciplines to check the integrity of the design.

Course Objectives/Topics

- Presenter Advanced Features
- TimeLiner
- Scripter
- Clash Detective
- **Please see page 2 for detailed topic list**

Prerequisites

Users must have completed the Autodesk Navisworks 2019 Essentials course.

Audience

This course is intended for users who want to learn the advanced tools and techniques of using Autodesk Navisworks.

Course Outline

Presenter Advanced Features

- Presenter Advanced Features
- Editing and Managing Materials Overview
- Editing Materials
- To Edit an Applied Material Procedure
- Rename and Manage Materials
- To Create a New Materials Folder Procedure
- To Create a New Material Procedure
- To Edit and Save a Material Project
- Advanced Material Editing Overview
- Advanced Editing
- To Access Advanced Material Edit Options Procedure
- Creating New Material Project
- Individual Light Effects Overview
- Individual Light Effects
- Adding and Editing Individual Light Effects Procedure
- Add and Edit an Individual Light Effect Project
- Image-Based Lighting Overview
- About Image-Based Lighting
- To Add an Image-Based Lighting Effect Procedure
- Adding an Image-based Light Effect Project
- Environment Backgrounds and Reflections
- About Environment Backgrounds and Reflections
- To Add an Environment Background Procedure
- Adding an Environment Background Project
- Custom Environments Overview
- Introduction to Custom Environments
- Editing a File for Image-based Lighting
- Edit an HDRI for Image-based Lighting Project
- Editing a File for a Background Environment
- Edit an HDRI for an Environment Background Project
- Importing Image Files into Presenter
- Importing Image Files into Presenter Project
- Light Scattering Overview
- About Light Scattering
- Creating a Light Scattering Effect Procedure
- Create a Light Scattering Effect Project
- Rich Photorealistic Content Overview
- About RPCs
- Add an RPC to a Model Project

TimeLiner

- TimeLiner
- TimeLiner Overview
- Open and Run a TimeLiner Simulation Procedure
- Run a Basic TimeLiner Simulation Project
- Creating Tasks
- About Creating Tasks
- To Create Tasks Procedure
- Creating Tasks Manually Project
- Gantt View
- Import Tasks from External Project File
- Linking to a Project File
- Linking to a Project File Procedure
- Importing Tasks - Construction Project
- Importing Tasks - Plant Project
- TimeLiner Simulation
- Simulation Control Bar
- Using a Simulation Project
- Configuring and Defining a Simulation
- The Configure Options
- To Add a Task Type Procedure
- Use the Simulation Settings Procedure
- Customizing a Simulation Project
- Simulation Export
- Exporting a TimeLiner Simulation
- Export a TimeLiner Simulation Procedure
- Exporting a Simulation Project

Scripter

- Scripter
- Scripter Overview
- About Scripts
- Creating and Managing Scripts Overview
- Creating Scripts Procedure
- Create and Organize Scripts Project
- Events Overview
- About Events
- Add and Create an Event Procedure
- Create and Configure Events Project
- Creating and Configuring Actions Overview
- About Script Actions
- Add an Action Procedure
- Create and Configure Actions Project

Clash Detective

- Clash Detective
- Clash Detective Overview
- Conducting a Clash Test Procedure
- Conduct a Simple Clash Test Project
- Selecting Items to Be Clashed
- Selecting Items Procedure
- Clash Test Settings
- Selecting Geometry Types
- Clash Testing Using the Find and Selection Set Tools Project
- Setting Clash Rules
- About Clash Rules
- To Set Pre-Defined, Edit an Existing, and Add a New Clash Rules Procedure
- Clash Results
- About Clash Results
- Adding and Reviewing Comments Procedure
- Clash Testing, Viewing Results, and Adding Comments Project
- Clash Test Reporting
- Report Contents
- Write and Read a Report Procedure
- Clash Testing and Creating a Report Project
- Audit Checks
- Conducting Clash Audit Checks Procedure
- Clash Testing After Clashes are Corrected Project
- Export and Import Clash Tests
- Export and Import Clash Tests Procedure
- Exporting and Importing Clash Tests Project
- Custom Clash Tests
- Setting up Custom Clash Tests Procedure
- Creating a Custom Clash Test Project
- Laser Scan Data Clashing
- Running a Clash Test with Laser Scan Data
- Running a Clash Test with Laser Scan Data Procedure
- Clash Testing Geometry Against Laser Scan Data Project
- Holding and Releasing Objects
- Clash Testing and Moving Objects Project
- SwitchBack in Clash Detective
- Using SwitchBack Procedure
- Using SwitchBack in Clash Detective Project
- Time-Based Clashing
- Preparation
- Run a Time-Based Clash Test Procedure
- Clash Detective with TimeLiner Report Procedure
- Conducting a Time Based Clash Test Project