Autodesk Navisworks Using Autodesk Navisworks in a BIM Workflow

Course Length: 2 days

The Autodesk Navisworks Using Autodesk Navisworks in a BIM Workflow course teaches you how to better predict project outcomes, reduce conflicts and changes, and achieve lower project risk using the Autodesk® Navisworks® Manage software in a BIM workflow.

Building Information Modeling (BIM) encompasses the entire building life cycle. BIM includes all phases of the design process, from model creation to construction and ending at operations and maintenance. Using a BIM workflow, you will learn how a design changes throughout the BIM process and how the changes affect the BIM model.

Over the course of this course, you will learn how to consolidate civil, architectural, structural, and MEP models into one BIM model. Starting with an Autodesk® Civil 3D® drawing file, you will append various Autodesk® Revit® and Autodesk® Inventor® models and check for conflicts. Note: Clash Detection is only available in Navisworks Manage – it is not available in Navisworks Simulate or Navisworks Freedom.

Next, you will use review and markup tools for communicating issues across disciplines. Finally, you will use TimeLiner, Animator, and Clash Detective to simulate construction and find constructibility issues and on-site clashes.

This course is designed for new and experienced users of the Autodesk Navisworks software in multiple disciplines.

Topics Covered

- Understanding the purpose of Building Information Modeling (BIM) and how it is applied in the Autodesk Navisworks software.
- Consolidate Models
- Navigating the Autodesk Navisworks workspace and interface.
- Creating a composite model.
- Transforming models for proper alignment.
- Review and Analyze Models
- Using basic viewing tools.
- Saving and retrieving views.
- Sectioning a model.
- Investigating properties.
- Searching for items.
- Hiding and unhiding items.
- Communication
- Measuring a model.
- Adding tags and comments to model components.
- Marking up and redlining the model.
- Animate a model.

- Collaboration
- Reviewing a model for clashes.
- Consolidating redlines from other team members.
- Construction
- Creating a construction timeline.
- Animating a construction timeline.

Prerequisites

This training course is designed for new and experienced users of the Autodesk Navisworks software in multiple disciplines. A working knowledge of 3D design and task-scheduling software is recommended.

Training Guide Contents

Chapter 9: Construct: Project Scheduling

- 9.1 Introduction to TimeLiner
- 9.2 Manually Creating a Construction Simulation
- 9.3 Importing an External Task List
- 9.4 Combining TimeLiner and Animator
- 9.5 Time-Based Clashes

Appendix A: Coordination Tools

- A.1 Creating a View in Autodesk Revit
- A.2 Setting a Project Point in Autodesk Revit
- A.3 Autodesk Civil 3D Object Enabler
- A.4 Creating an .FBX File in Autodesk InfraWorks 360
- A.5 Preparing a Corridor Model for TimeLiner
- A.6 Preparing an Autodesk Revit Model for TimeLiner