

Autodesk Navisworks Essentials

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 Scripter tools, students create interactive animations. In addition, students learn how the Autodesk Rendering tools can help them create photorealistic images and animations.

Duration

4 Days

Typical Schedule

This class starts each day at 9:00 am and ends at 4:00 pm.

Prerequisites

Knowledge of 3D design process
Proficient with Microsoft® Windows®

Topics Covered

- 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
- TimeLiner
 - Time Liner Overview
 - Creating Tasks
 - Gantt View
 - Import Tasks from External Project File
 - Configuring and Defining a Simulation
 - Simulation Export
- Animator
 - 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
 - Setting up a Quantification Project
 - Item and Resource Management
 - 3D Model and Virtual Takeoff
 - Managing Takeoff Data
 - Takeoffs
 - Analyzing Changes
 - Exporting Takeoff Data
- Clash Detective
 - 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