

COURSE OUTLINE

Using Navisworks, the industry leader in BIM (Building Information Modeling) for trade coordination, students will learn to perform clash detection, as well as animation, and quantification. The three-day hands-on course begins by learning the fundamental features of Navisworks review, Simulate and Manage. The class progresses through creating and administering clash detection tests, links task-scheduling with 3D construction simulations, quantifying materials and associated assets, and model visualization.

CLASS DURATION: 3 DAY TOPICS

Getting Started

- Getting Started with Autodesk Navisworks
- Publishing, Merging, Refreshing, & 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 Objects in an Animation Set
- Section Plane Sets
- Controlling Animation Scene Playback

Data Tools

- Database Support (Data Tools)

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 Takeoff
- Managing Takeoff Data
- 2D Takeoffs
- Analyzing Changes
- Exporting Takeoff Data

Clash Detective

- Clash Detective Overview
- Clash Results
- Clash Test Reporting
- Working with Clash Tests
- Audit Checks
- Exporting and Importing Clash Tests
- Laser Scan Data Clashing
- Methods for Testing & 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
- Photo Realistic Rendering