



NAVISWORKS 4D & 5D SIMULATION

The biggest advantage BIM brings to efficient building design is its analytic capabilities. It is able to export three-dimensional information from a Revit Model; different analytic software could be used for further analysis. This course enables you to predict the feasibility of your design or whether it meets environmental standards, workflow and etc early in the design process in a virtual reality space. By the end of the course, students will be able to perform some of its iconic analysis features, such as: Clash Detection, 4D TimeLiner Simulation, 5D project budgets and Realistic 3D animation to maximize the benefits of the BIM project.

NAVISWORKS

4D & 5D SIMULATION

COURSE OUTLINE

Getting Started

- Product Overview
- Workspace Interface Overview
- Navigation
- Opening and Appending Files in Navisworks
- Saving, Merging, Refreshing, and Publishing Files
- Selection Tree and Selecting Objects
- Check and Set File Units
- Merging NWF Files and publish an NWD File

3D Model Review

- Hiding Objects and Overriding Materials
- Object Properties Measuring and Moving Object
- Selection and Search Sets
- Viewpoints
- Comments and Redlining
- Sectioning
- Links
- Comparing Models
- Switchback
- Navisworks Real-Time Rendering
- Working with Animations in Navisworks

TimeLiner

- Understanding TimeLiner
- Creating Tasks
- Import Tasks from External Project File
- TimeLiner Simulation
- Configuring and Defining a Simulation
- Simulation Export

Animator

- Animator Overview
- Creating a Basic Animation
- Manipulate Geometry Objects in Animation Set

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
- Model and Virtual Takeoff
- Managing Takeoff Data
- Analyzing Changes

Clash Detective

- Understanding Clash Detective
- Setting Clash Rules
- Clash Results
- Clash Test Report
- Export and Import Clash Tests
- Custom Clash Tests
- Laser Scan Data Clashing
- Holding and Releasing Objects
- SwitchBack in Clash Detective
- Time-Based Clashing

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Autodesk Rendering

- Autodesk Rendering Overview
- Adding Materials to a Model
- Creating and Editing Materials
- Material Mapping
- Lighting
- Sun and Sky Lights
- Exposure Control
- Photorealistic Rendering
- Preparing and Rendering a Model

Data Tools

- Database Support (Data Tools)
- About Database Support

