

BIM Software Practical Course – Navisworks (Basic Level)

Introduction:

BIM enables a virtual information shared-based model to be handled from the design team (architects, surveyors, engineers of various disciplines), main contractors, sub-contractors to the owner / operator of the building. This reduces information losses that traditionally occurred when a new team takes 'ownership' of the project, and provides more extensive information to owners of the project.

Virtual Design and Construction (VDC) is a new way to working with BIM for collaboration. As Navisworks is one of the VDC software providing effective collaboration between all parties. Navisworks is a next generation VDC solution for the construction industry which provides Clash Detection, 4D construction simulation, 5D cost tracking and much more.

The course will show how to do VDC including clash analysis, 4D and 5D in Navisworks.

Learning Outcomes:

Upon completion of this two-days training course, the participants will be able to have a basic understanding of BIM and VDC environment, and how to use Naviswork to manage VDC environment and produce high quality deliverables , tracking the work progress of each trade and reducing abortive work done.

Course Outline:

1. Getting Started (1.5 hours)
 - Product Overview
 - Export NWC from Revit
 - Workspace Overview
 - Navigation
 - Opening and Appending Files in Navisworks
 - Saving, Merging, Refreshing, and Publishing Files
 - Selection Tree and Selecting Objects
 - The Autodesk Navisworks Engine
 - Check and Set File Units
 - Setting Selection Resolution and Sorting Structures
 - Merging NWF Files
 - Publish an NWD File

2. 3D Model Review (2.5 hours)
 - Hiding Objects and Overriding Materials
 - Object Properties Measuring and Moving Objects
 - Selection and Search Sets
 - Viewpoints
 - Comments and Redlining
 - Measure the model with dimension
 - Get the coordinate and principal datum with measure Tools
 - Sectioning
 - Links
 - Comparing Models
 - Appearance Profiler
 - Switchback

3. Timeliner (2 hours)
 - Timeliner Overview
 - Gantt View
 - Creating Tasks
 - Import Tasks from External Project File
 - Timeliner Simulation
 - Simulation Control Bar
 - Configuring and Defining a Simulation
 - Simulation Export

4. Animator (2 hours)
 - Animator Overview
 - Creating a Basic Animation
 - Manipulate Geometry Objects in an Animation Set
 - Section Plane Sets

5. Scripter (1 hour)
 - Scripter Overview
 - Creating and Managing Scripts
 - Creating and Configuring Events
 - Creating and Configuring Actions

6. Clash Detective (3.5 hours)
 - Clash Detective Overview
 - Setting Clash Rules
 - Clash Results
 - Clash Test Reporting
 - Working with Clash Tests
 - Audit Checks
 - Export and Import Clash Tests
 - Custom Clash Tests
 - Holding and Releasing Objects
 - SwitchBack in Clash Detective

7. Autodesk Rendering (1 hour)
 - 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
 - Preparing and Rendering a Model

8. Assignment and End Assessment (1.5 hours)

Target Audience:

1. BIM Modeler / Consultant working for Architectural, Structural, Quantity Survey and Building Services Consultancy firms, Building Project Management companies, and Developer of the Project.
2. Those are interested in BIM/VDC Use
3. Suitable for applicants who are interested in this course

Pre-requisite requirement:

Nil

Assessment:

Assignment and end assessment

Award:

A certificate of completion will be awarded to the delegates with 80% of attendance and pass the end assessment.

Max. Class Size:20

Medium of Instruction: Cantonese supplemented with English

Language of Training Materials:

English

Duration for Training:

7.5 hours x 2 sessions (Full Time, FT) or
3 hours x 5 sessions (Part-time, PT)

Course Fee:

HKD3,000 per head