

COURSE DESCRIPTION

The Autodesk® Navisworks® Essentials training course instructs students in best approaches to combine 3D geometry from cross disciplines into one scene to enable effective model reviews. Through a hands-on, practice-intensive curriculum, students acquire the knowledge needed to review and markup the model, use TimeLiner, Animator, Scriptor, Quantification, Autodesk Rendering, as well as the Clash Detective tools within the Autodesk Navisworks software.

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

TRAINING OBJECTIVES

After completing this course, students will be able to:

- Use the NavisWorks applications to combine 3D models from cross discipline into one scene, enabling effective review.
- Learn to use the TimeLiner, Animator, Scriptor and Presenter tools within NavisWorks.
- Learn how to carry out Clash Detection.

PRE-REQUISITES

Underlying knowledge of Architectural design, drafting or Engineering practices is recommended. This training course is designed for a new Autodesk Navisworks users who need to become familiar with the main tools within the software.

COURSE OUTLINE

DAY 1

Getting started with NavisWorks

- User Interface/Workspace overview
- Opening and appending files
- Saving, merging and refreshing files

Visual project model reviews

- Navigation
- Performance Indicator
- Selection tree and selecting objects
- Hiding objects and overriding material
- Object properties
- Measuring and moving objects
- Selection and search sets
- Viewpoints
- Animations
- Sectioning

TimeLiner (4D Simulation).

- TimeLiner overview
- Creating tasks
- Importing tasks from an external project file
- TimeLiner simulation
- Configuring and defining a simulation
- Simulation export

Animator

- Animator overview
- Creating a basic animation
- Cameras and camera viewpoints
- Manipulate geometry objects in an animation set
- Section plane sets
- Controlling animation scene playback

DAY 2

Scripter

- Scripter overview
- Creating and managing scripts
- Creating and configuring events
- Creating and configuring actions

Presenter basic

- Presenter overview
- Apply materials to model items
- Adding lighting effects to a scene
- Adding background effects
- Rendering effects
- Outputting rendered images
- Outputting animations (videos)

Presenter advanced features

- Editing and managing materials
- Advanced material editing
- Ground planes
- Individual light effects
- Image-based lighting
- Environment backgrounds and reflections
- Light scattering

Clash Detection (NAVISWORK MANAGE)

- Clash detective overview
- Selecting items to be clashed
- Clash test settings
- Setting clash rules
- Clash results
- Clash test reporting
- Audit checks
- Create and save batches of clash tests
- Export and import clash tests
- Custom clash tests
- Setting up custom clash tests
- Time base clashing