Publication date : 04/29/2024

Course : Revit Structure, introduction

Practical course - 4d - 28h00 - Ref. RSN
Price : 1650 € E.T.

Building Information Modeling (BIM) technology is changing the way buildings are designed and constructed. You'll master the features of AutoDesk Revit Structure to create structural elements for a building based on a BIM project template in a collaborative context.

Teaching objectives

At the end of the training, the participant will be able to:

- Understanding BIM
- Discover the graphical interface, workspace and help of Revit Structure
- Create a model and its structural elements based on a BIM project template
- Managing a project in compliance with the BIM charter and conventions

Intended audience

Building designers, architects, engineers, project managers, manufacturers, designers, draftsmen, design offices and project owners.

Prerequisites

Good knowledge of a graphical operating system.

Course schedule

1 BIM concepts and principles

- Digital mock-up.
- Categories, families, types and occurrences.
- Project design method.
- The notion of object and view.
- The concept of standard and project template.

Hands-on work

Open a digital model.

PARTICIPANTS

Building designers, architects, engineers, project managers, manufacturers, designers, draftsmen, design offices and project owners.

PREREQUISITES

Good knowledge of a graphical operating system.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

2 The user interface

- Project Explorer.
- Navigation in plan, ceiling, floor and reference views.
- Creation of elevation views linked to project georeferencing.
- Create or delete levels according to the project.
- Hide and temporarily isolate objects.

Hands-on work

Create customized workspaces.

3 Modeling and structural elements

- Creation of DTM terrain from contour lines and point files.
- Create an earthwork, levelled area, cut/embankment and property limits.
- Creation of wall system and slab system families, structural parameters.
- Add different types of foundation.
- Add columns and beams (steel/concrete).
- Addition of a truss.

Hands-on work

Modeling an APD project.

4 The analytical model

- Presentation of the analytical model.
- Analytical model visualization options.
- Digital mock-up data exchange.

Hands-on work

Verification of consistency between analytical and physical models.

5 The 3D model

- Concrete structure. Steel structure.
- 3D view Modeling a structure using AutoCAD drawings.

Hands-on work

Modeling a structure using AutoCAD drawings.

6 Layout and printing of views in a sheet with title block

- Prepare the views to be placed in the sheets.
- Frame the area to be printed.
- Display cast shadows, define sun position.
- Print in PDF format.

Hands-on work

Distribute a project in print and digital format.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

7 Collaborative work (BIM)

- Manage standardized file formats.
- Manage master files and synchronize.
- BIM data portal and library.

Hands-on work

Réaliser un gabarit complet respectant la charte et les conventions BIM.