

# Course : Infraworks, modeling infrastructure data for BIM

Practical course - 2d - 14h - Ref. BIK

Price : 1380 CHF E.T.

AutoDesk Infraworks accelerates the design of larger-scale infrastructures created from existing data sources. You'll gain the knowledge you need to assemble terrains and images, and propose alternatives for urban projects large and small.

## Teaching objectives

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

- ✓ Getting to know the interface
- ✓ Conceptualizing a customized project
- ✓ Handling layers
- ✓ Publish and synchronize models
- ✓ Setting up light and shade

## Intended audience

Managers, architects, engineers, technicians, draughtsmen, drawing designers in design offices.

## Prerequisites

No special knowledge required.

## Course schedule

### 1 InfraWorks software

- Terminology and examples of use and realization.
- Context of use.
- Interface and environment.
- Pallet organization.
- Menus and navigation.
- Settings and configuration.
- Pan, zoom, scroll wheel and view tab functions.

### PARTICIPANTS

Managers, architects, engineers, technicians, draughtsmen, drawing designers in design offices.

### PREREQUISITES

No special knowledge required.

### 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 Interface and tools

- Data analysis.
- 3D models, point clouds and other data types.
- A new model and field data.
- Data source and file format.
- Projection systems to manage the terrestrial ellipsoid.
- Add orthophotos, transport networks and hydrography.
- 3D models and point clouds.
- Using bookmarks.

### Hands-on work

Getting to grips with the interface.

## 3 Project design and modification

- Roads, tracks and railroads.
- Quantities for engineering structures.
- Covered areas, vegetated areas and urban areas.
- Existing buildings and street furniture.
- Materials and style palettes.
- Design standards.
- Creating variants.

### Hands-on work

Project design in an urban environment.

## 4 Adding further details

- Relevant points of view.
- Install fencing and railings.
- Set up drainage and surface networks.
- Import water bodies.

### Hands-on work

Placement of add-ons in the previously created environment.

## 5 Design and document management tools

- The storyboard.
- Measurement tools, telemetry, field statistics.
- The proposals.
- Layer management.
- FBX and IMX files.
- Visual effects, lighting, shadows, clouds and wind.
- Clichés and renderings.

### Hands-on work

Measurement of field statistics and proposals.

## 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](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

## 6 Project presentation

- Animations with titles and captions.
- Visualization display options.
- Visual effects functions.
- The solar environment.
- Edit renderings and image captures.
- Add, delete or export a storyboard.
- Position a camera in InfraWorks.

### Hands-on work

Setting up the solar environment and visual effects.

## 7 Design analysis

- Group concepts.
- Templates: publish and synchronize them.
- Create table nomenclatures.
- About scenarios.
- Measurement tools.
- Studying a plot of land.
- Light and shade.
- Templates: how to share projects.

### Hands-on work

Environmental analysis using measurement tools.

## 8 Collaborations in the Autodesk suite

- Interaction with AutoCAD Civil 3D.
- Interaction with Revit.
- Interaction with Navisworks.

### Hands-on work

Handling the Autodesk suite.