

Course : Blender, an introduction to 3D creation

Practical course - 4d - 28h00 - Ref. LER

Price : 1940 CHF E.T.

★★★★☆ 4,4 / 5

Blender is 3D modeling, animation and rendering software. You'll learn about the interface's main functions. You'll learn how to design a 3D object and render it realistically. You'll create animations and various physical simulations such as particles.

Teaching objectives

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

- ✓ Getting to grips with the Blender interface
- ✓ Modeling and animating objects in 3D
- ✓ Design and apply materials and textures to objects
- ✓ Manage lighting and object rendering

Intended audience

Architects, builders, draughtsmen, designers, engineers, design office managers.

Prerequisites

Good knowledge of a graphical operating system.

Course schedule

1 User interface

- 3D, orbit and panoramic views from the camera.
- Organize the 3D view with layers.
- Properties panel.
- Object mode and simple object relationships.

Hands-on work

Install Blender. Create a view.

PARTICIPANTS

Architects, builders, draughtsmen, designers, engineers, design office managers.

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 Object creation and modification

- Rectangular, circular and lasso selection.
- Bézier curves. Extrusion along a curve.
- Transforming objects. The Simple Deform tool.
- Modeling with the Extrude function. Basic modeling, points, edges, faces.
- Modifiers: Array, Boolean, Edge...

Hands-on work

Design new objects.

3 Designing materials and textures

- Assign materials to objects.
- The creation of simple, nodal materials.
- Surface, diffuse and specular shaders.
- Place and assign textures.
- Volumetric shaders.

Hands-on work

Application of texture effects.

4 UV Mapping and Texture Painting

- UV unfolding, testing and correction.
- Use UV Mapping on materials.
- Texture creation directly in Blender.
- Unfolding export.
- Save rendering on a UV texture (Bake).

Hands-on work

Plating an image onto a UV.

5 Lighting and rendering management

- The different types of light.
- Colors, intensity, distance and shading.
- Still image rendering.
- Camera handling, focal length, positioning and depth of field.
- Output dimensions. Rendering format. Anti-aliasing.
- Rendering through different engines.

Hands-on work

Rendering with lighting.

6 Introduction to Compositing

- The basics of compositing.
- Video sequence editor.
- Compositing nodes.

Hands-on work

Composing an image.

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 Introduction to the physical engine and particles

- Physics engine basics and particle management.
- Physics (flexible bodies, rigid bodies).
- Generic, dynamic, static particles.

8 Introduction to animation management

- Notion of key images and Timeline.
- Create key images: Position Rotate Scale.
- Introducing Graph Editor.
- Animate interface properties.

Hands-on work

Create an animation.

Dates and locations

REMOTE CLASS

2026 : 9 June, 22 Sep., 15 Dec.