Publication date : 02/20/2024

Course : 3D modeling with Rhinoceros: become an expert in industrial design

Practical course - 3d - 21h00 - Ref. RHI
Price : 1540 CHF E.T.

Discover Rhinoceros 3D: this in-depth training course will enable you to master advanced modeling features to create complex, detailed designs for a variety of industrial sectors. You'll manipulate organic and geometric shapes with precision to bring your creative ideas to life.

Teaching objectives

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

- Get to grips with the Rhinoceros interface and initial functions
- Modelling simple and complex shapes
- Use advanced modeling techniques
- Apply knowledge of industrial design
- Produce realistic renderings and present projects

Intended audience

Anyone wishing to create 3D models with Rhinoceros.

Prerequisites

Good knowledge of the IT environment.

Course schedule

1 Introduction to Rhinoceros 3D and basic concepts

- Introduction to Rhino.
- Rhino user interface.
- Navigation and view manipulation.

Hands-on work

Navigate the Rhinoceros user interface and perform simple view manipulations such as zooming and rotating.

PARTICIPANTS

Anyone wishing to create 3D models with Rhinoceros.

PREREQUISITES

Good knowledge of the IT environment.

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 Basic modeling functions

- Creation of primitive shapes.
- Object modification.
- Use of transformation tools.
- Use drawing tools.

Hands-on work

Create a simple object by combining primitive shapes (cube, sphere) and modifying them using transformation tools.

3 Modeling complex surfaces

- Use of control curves.
- Create surfaces from curves.
- Use surface modification tools.

Hands-on work

Use control curves to create a complex surface and modify it using surface modification tools.

4 Solid modeling and assembly

- Boolean operations.
- Create solids from surfaces.
- Parts assembly.

Hands-on work

Create a complex 3D model using Boolean operations to assemble solids from separate surfaces.

5 Advanced modeling techniques for industrial design

- Use of parametric modeling tools.
- Creation of molds and dies.
- Optimizing modeling for manufacturing.

Hands-on work

Use parametric modeling tools to create a mold or die for a specific object, optimizing the model for manufacturing.

6 Rendering and visualization

- Application of materials and textures.
- Lighting and scene rendering.
- Creation of realistic images.

Hands-on work

Apply materials and textures to a 3D model, configure lighting for a scene and create a realistic image with the rendering function.

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 Advanced modeling techniques

- Use of deformation tools.
- Create complex curves.
- Use mesh editing tools.
- Creation of organic models.

Hands-on work
Use deformation tools to modify existing objects, create complex curves and organic models using mesh editing tools.

8 Final projects and presentation

- Choice of a final project.
- Completion of the final project using the skills acquired.
- Presentation and evaluation of final projects.

Dates and locations

REMOTE CLASS
2026 : 27 May, 7 Oct.