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Course : Autodesk Inventor, discovering 3D modeling

Practical course - 4d - 28h00 - Ref. AIV
Price : 1940 CHF E.T.

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You'll discover Autodesk Inventor and learn how to use its interface effectively to carry out your design work. You'll learn about 2D sketching, modeling and 3D functions. All with a view to creating parts and assemblies, as well as the associated drawings.

Teaching objectives

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

- Get to grips with the Inventor interface
- Learn the logic of Inventor design: parametric modeling
- Evaluate the main business-oriented functions
- Create parts, assemblies and associated drawings

Intended audience

Good knowledge of a graphical operating system. Experience required.

Prerequisites

Managers, architects, engineers, technicians, draughtsmen, drawing designers in design offices involved in creating and modifying drawings.

Practical details

Hands-on work

Design and modeling of parts with industrial constraints.

Course schedule

1 Interface presentation

- Inventor native file formats.
- Inventor overview.
- Menu bar, ribbon, graphics area, properties panel.
- The project tree panel.
- System and work document setup options.

Hands-on work

Create a personalized workspace.

PARTICIPANTS

Good knowledge of a graphical operating system. Experience required.

PREREQUISITES

Managers, architects, engineers, technicians, draughtsmen, drawing designers in design offices involved in creating and modifying drawings.

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 2D sketch

- Inventor 3D concept and sketch generation.
- Get to grips with the drawing environment and tools.
- Editing functions, configuration of snaps and increments.
- Difference between sketch, construction and dimensioning of sketch objects.
- Modifiers.
- Lock/unlock an object, duplicate and apply properties.
- Application of geometric constraints.
- Locking and releasing constraints.

Hands-on work
Creation of sketches.

3 3D modeling and functions

- Model with the extrusion tool.
- Effective revolution control for cylindrical shapes.
- Chamfer and Fillet tools for dimensioning and mechanical design.
- Drilling to suit materials and screw constraints.
- Creates hollow or volume grooves.
- Multipath scanning.
- Smoothing a complex shape.

Hands-on work
Volume setting and modification of mechanical parts.

4 Create and modify a 3D assembly

- The tree structure of an assembled project.
- Import items.
- Single instance/multiple instances.
- The different types of connection.
- The different types of assembly constraints.
- Connect the source part to the target part.
- Offset, rotational movement, rotational and translational movement.

Hands-on work
Assemble the parts.

5 Layout

- Presentation files and sheet features in Inventor.
- Place a view in the layout and modify title block attributes.
- Insert a component and create views.
- Cutting creations.
- Choice of visual styles and views.
- Export presentation sheets in DWG format.
- Export in PDF format.

Hands-on work
Drawing of the industrial part.

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.

Dates and locations

REMOTE CLASS
2026 : 9 June, 8 Sep.