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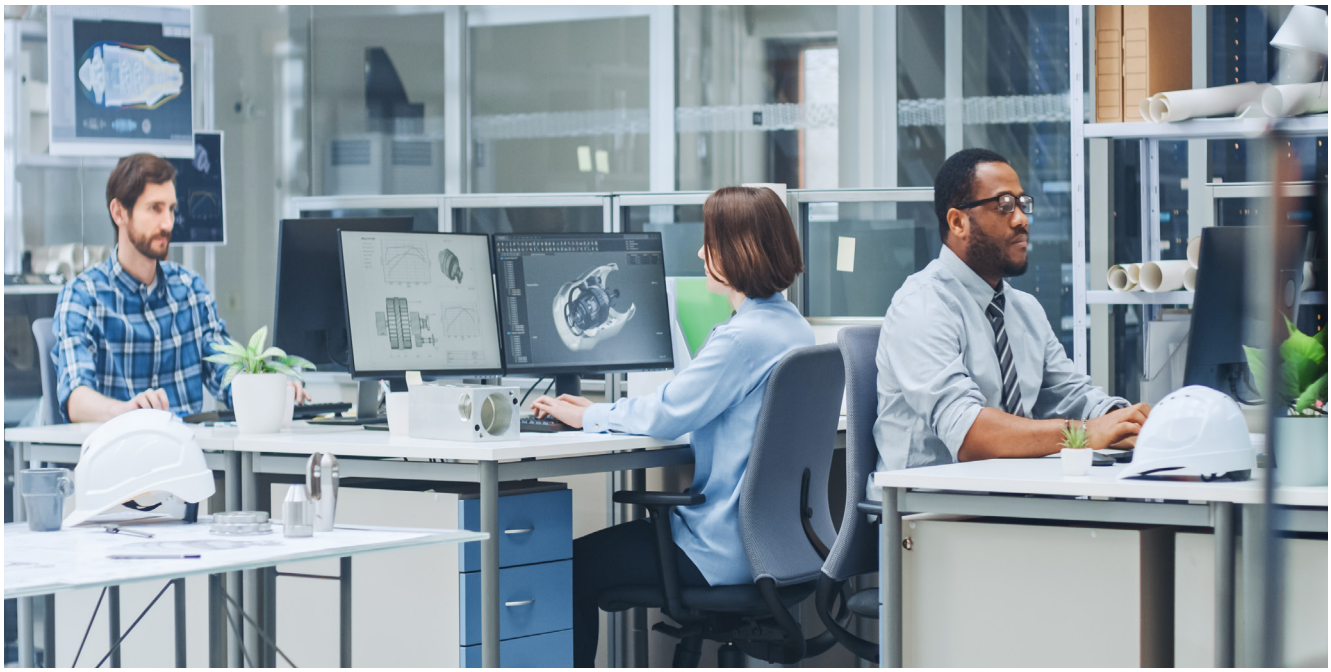
# ICDL Professional

# 3D DESIGN



**The 3D Design module covers the main concepts and skills needed to create three-dimensional drawings using computer-aided design (CAD).**

This module develops the knowledge and skills to use 3D design software for tasks such as manipulating objects and rendering photorealistic graphics using lights, textures, and backgrounds.

This module is suitable for students, designers, engineers, architects, technical staff, and people who want to build on their 2D CAD skills by exploring the potential of 3D modelling. CAD is used extensively in a wide range of industries.

**Develop the skills needed to create 3D design creations using computer-aided design tools.**

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# The 3D Design module is part of ICDL Professional, designed to meet the needs of modern professionals in a range of sectors.

## Main learning outcomes

**Successful candidates will be able to create, edit, and output a three-dimensional design or drawing. After passing this module, candidates will feel confident using a 3D CAD application to create high-quality designs. They will be able to:**

- understand how 3D design applications are used to create and modify drawings
- use, save, and recall model view tools such as pan, zoom, and rotate
- know how to draw points, lines, arcs, splines, circles, and polygons and use surface modelling to extrude surfaces and create planes, edge surfaces, and surface revolutions
- create and manipulate object or graphic elements
- know how to create photorealistic presentations by rendering a model or scene

### Module Overview

| Category | Skill Set |
|---|---|
| Basic Functions | • File Management<br>• Model View |
| Main Operations | • 3D Coordinates systems<br>• Geometric Design Aids<br>• 3D Geometrical Drawing<br>• 3D Surface Modelling<br>• 3D Manipulate Object/ Graphic Elements<br>• Create Solids<br>• Modify Solid Objects<br>• Create and modify Parametric Objects |
| Advanced Operations | • 3D Views<br>• Photorealistic Presentation |

## Why certify with ICDL?

- ICDL certification is internationally recognised by employers and institutions.
- ICDL modules are developed with input from computer users, subject matter experts, and practising professionals from all over the world.
- The regularly updated syllabus content reflects day-to-day tasks and responsibilities typical of job roles.
- ICDL modules focus on skills acquisition as well as an understanding of concepts.
- ICDL syllabus content is vendor-independent so that skills and knowledge are transferable.
- ICDL has rigorous Quality Assurance Standards (QAS) and regular quality audits are conducted internally and externally.