

COMPUTER AIDED DESIGN AND MANUFACTURING LEARNERS' INFORMATION



If you fancy yourself as a bit of a designer, then a qualification in Computer Aided Design (CAD) and Manufacturing (CAM) could be right for you. Used at all stages of design, it could help you shape your future.

CAD systems are ever developing and have changed the computing skills of a designer. The qualifications have been designed to demonstrate and develop the link between CAD and CAM systems with particular emphasis on the processing of solid and surface models.

The CAD qualifications include 2D & 3D CAD and Parametric Modelling. The CAM qualifications include Computer Aided Part Programming, Manual Part Programming, CNC Machining at Level 2 and also CMM and Rapid Prototyping at level 3.

ARE THESE QUALIFICATIONS RIGHT FOR ME?

The qualifications have been designed to provide you with a journey from the conceptual design (2D/3D CAD & Parametric Modelling) to the manufacturing (CAM) of the finished product or prototype. Levels 1 and 2 are intended for new users, level 3 is for advanced operators.

QUALIFICATION STRUCTURE

Depending on the level you take, there are a variety of different pathways within these qualifications:

- **Levels 1-3 Awards in CAD Parametric Modelling** (7-10 credits)
- **Level 2 Awards in 2D CAD and CAM (2D)** (7-9 credits)
- **Level 2 Certificate in Computer Aided Design and Manufacturing (2D)** (16 credits)
- **Level 3 Awards in 2D CAD, CAM (2D), 3D CAD and CAM (3D)** (8-10 credits)
- **Level 3 Certificates in Computer Aided Design & Manufacturing in both 2D and 3D** (18-19 credits).

ARE THERE ANY ENTRY REQUIREMENTS?

Prior qualifications, learning or experience are not required. However, your training provider will need to make an initial assessment to ensure that the level of the qualification is appropriate for you.

HOW WILL I LEARN AND BE ASSESSED?

You will be taught in a classroom environment through college based learning.

For CAD and Parametric Modelling you will have to complete practical assignments and a GOLA test. For CAM you will have to complete practical assignments and knowledge tests.

PROGRESSION

The qualifications have been designed to provide a route into employment. They can also offer opportunities if you wish to progress into similar courses within higher education.

WHAT JOB ROLES MIGHT BENEFIT FROM THESE QUALIFICATIONS?

On completion of these qualifications, you could consider one of the following job roles:

- CAD Draughtsperson/Designer
- Engineering Craft/CNC machinist
- Engineering Operative.

KEY POINTS

- Fully accredited on the Framework
- Supported by SmartScreen.

WHAT IS THE NEXT STEP?

You can find out more by contacting your nearest City & Guilds centre. Log on to our website to find the location of your nearest one, or contact our Customer Relations team:

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IF YOU'RE ASKED FOR A QUALIFICATION NUMBER, PLEASE QUOTE 7579

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