

COMPUTER AIDED DESIGN AND MANUFACTURING CENTRES' INFORMATION



CAD systems are ever developing and have changed the computing power of a designer. These City & Guilds 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. They enable learners to demonstrate that they have the right skills in using CAD systems.

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.

WHO ARE THE QUALIFICATIONS AIMED AT?

The qualifications have been designed to provide the learners with a journey from the conceptual design (2D/3D CAD & Parametric Modelling) stage 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 learners 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, you will need to make an initial assessment to ensure that the level of the qualification is appropriate for your learners.

The nature of both the learning and assessment required for the qualifications is such that learners will need basic literacy and numeracy skills ie. the ability to read and interpret written tasks and to write answers in a legible form. They will also need to be able to organise written information clearly and coherently, although they will be assessed for spellings and grammatical accuracy unless this is part of the assessment criteria.

HOW ARE THE QUALIFICATIONS DELIVERED AND ASSESSED?

Your learners must be taught in a classroom environment through college based learning.

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

HOW LONG WILL IT TAKE?

The awards have been designed with guided learning hours of between 60 and 90 hours.

The certificates have been designed with guided learning hours of between 160 to 170 hours.

DO THE QUALIFICATION FORM PART OF A RECOGNISED FRAMEWORK?

These qualifications are part of the Qualifications and Credit Framework. For more information about the Framework, please visit www.cityandguilds.com/

KEY POINTS

- Fully accredited on the Framework
- Uses City & guilds Global On-line Assessment system (GOLA)
- Supported by SmartScreen
- Eligible for funding on the Framework

PROGRESSION

The qualifications are designed to provide a route into employment. They can also offer opportunities to progress on to similar courses within higher education.

WHAT IS THE NEXT STEP?

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

City & Guilds
1 Giltspur Street
London
EC1A 9DD
T +44 (0)20 7294 2800
F +44 (0)20 7294 2405
centresupport@cityandguilds.com
www.cityandguilds.com

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

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publications.

©2009 The City and Guilds of London Institute. All rights reserved. City & Guilds is a trademark of the City and Guilds of London Institute. City & Guilds is a registered charity (number 312832) established to promote education and training.

1 Giltspur Street
London
EC1A 9DD
T +44 (0) 20 7294 2468
F +44 (0) 20 7294 2400
www.cityandguilds.com

OCTOBER 2009