

28 May 2015

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

## City & Guilds

601/5118/3 Level 2 in Certificate in Computer Aided Design

## <u>OVERVIEW</u>

What does this qualification cover?

This qualification provides an introduction into Computer-aided design (CAD) to assist in the creation, modification, analysis, or optimization of a design. Learners will learn how to design curves and figures in two-dimensional space using 2D CAD software and curves, surfaces, and solids in three-dimensional (3D) space using Parametric Modelling software. It will allow learners to cover the skills and knowledge required for employment as a designer or draughts person or progress onto further learning in preparation for entry into the Advanced Manufacturing and Engineering sector.

All learners will complete two units:

- Computer Aided Design Using Parametric Modelling Software
- Using 2D Computer Aided Design Software

The following areas will be covered within each unit:

**Parametric Modelling** - using a parametric modelling workstation safely, create sketches, create work features and use features, create table driven parts and assemblies, understanding motion and driven assembly constraints, create a drawing layout to aid the interpretation of design intent and create presentation quality displays of parts and assemblies.

**2D CAD** - using key components in 2D CAD software, creating lines and shapes relative to a co-ordinate system, using text, hatch and simple dimensioning routines, modify existing drawings and output a 2D drawing layout.

This is a Framework qualification.

Who could take this qualification?

This qualification is designed for learners wishing to undertake a career as a draughts person or design engineer who have little or no knowledge of CAD software or may have completed the Level 1 Award in Parametric Modelling. The Level 2 Certificate in Computer Aided Design would be appropriate for someone who wanted to learn how to design in both 2D and 3D.







If you only wanted to learn about 2D or 3D then the Level 2 Award in 2D Computer Aided Design or the Level 2 Award in Parametric Modelling would be more suitable.

It is suitable for anyone aged 16 years old or over, has no formal entry requirements and would not be taken as part of an apprenticeship.

## WHAT COULD THIS QUALIFICATION LEAD TO?

Learners could progress onto an intermediate and/or advanced apprenticeship in Engineering or onto further learning through other qualifications such as:

City & Guilds Level 3 Award in Parametric Modelling – 601/5114/6
City & Guilds Level 3 Award in 2D Computer Aided Design - 601/5116/X City & Guilds Level 3 Certificate in Computer Aided Design – 601/5119/5
City & Guilds Level 3 Diploma in Engineering - 600/0881/7

This qualification could lead to job roles in Advanced Manufacturing and Engineering such as:

- Draughtsperson
- Design Engineer.

## WHO SUPPORTS THIS QUALIFICATION?

This qualification is supported by the following Colleges of Further Education and Training Providers:

- Tameside College
- Bracknell and Wokingham College
- CAD Centre UK