

Computer Aided Design (CAD)

(1-year course)

Want to know more?

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Exam board:
City & Guilds
cyberepq.org.uk

Overview

The City and Guilds qualification in Parametric Modelling is a Computer Aided Design (CAD) course that introduces you to a breadth of skills suited to students considering a career path in Engineering, Architecture, or broader design. This course is available to all students not taking A level Design and Technology (as it is already built into the DT Lower Sixth year). The course is entirely computer based so no hand drawing skills are required. It is a competency-based course that will see you working at your own pace toward the final assessments. Historically the course has seen 95% of students attaining the top grade of distinction.

What skills will I develop?

The course uses a series of online videos and resources that will gradually build your understanding and capability enabling you to create increasingly intricate 3D models using Solidworks. You will use these models to create technical drawings, assemblies of parts and rendered images. You will be able to read technical drawings and create highly detailed models independently by the end of the course. You may go on to use other forms of CAD software depending on your chosen career path and you will be able to quickly adapt to them thanks to your solid understanding of 3D modelling software. The course also provides you with UCAS points if you plan on applying to university.

Whilst not mandatory you are encouraged to use your new skills to use the DT department's 3D printers to create your own outcomes. This could help support outcomes in EPQ projects, create interview portfolio pieces or simply to put your skills to the test!

How will I be assessed?

Students undertake 3 assessment components and create a portfolio of evidence showing your progress through the course content. Assessments are done under teacher supervision when you have made sufficient progress.

Component 1

20%

Written test. Pass/Fail

Component 2

30%

Creation of 3D modelled part and technical drawing. Pass/Merit/Distinction

Component 3

30%

Creation of a series of 3D modelled parts put into an assembly and technical drawing. Pass/Merit/Distinction