



GCSE Design & Technology

THE COURSE

The EdExcel Design & Technology course enables you to understand and apply iterative design processes by exploring, creating and evaluating a range of outcomes. You will use creativity and imagination to design and make prototypes (together with evidence of modelling to develop and prove product concept and function) that solve real and relevant problems, considering your own and others' needs, wants and values. It will also give you opportunities to apply knowledge from other disciplines, including mathematics, science, art and design, computing and the humanities. You will build upon your subject knowledge in design and technology from Key Stage 3, incorporating knowledge and understanding of different materials and manufacturing processes in order to design and make, with confidence, prototypes in response to issues, needs, problems and opportunities. You will develop an awareness of practices from the creative, engineering and manufacturing industries and through the critique of the outcomes of design and technology activity, both historic and present day, you should develop an understanding of its impact on daily life and the wider world, thus helping you to understand that high-quality design and technology is important to the creativity, culture, sustainability, wealth and wellbeing of the nation and the global community.



COURSE STRUCTURE

COMPONENT 1: Written Exam (1 hour 45 minutes)

The paper consists of two sections as follows:

Section A: Core

This section is worth 40 marks and contains a mixture of different question styles, including open-response, graphical, calculation and extended-open-response questions. (There will be 10 marks of calculation questions in Section A.)

Section B: Timber category

This section is worth 60 marks and contains a mixture of different question styles, including open-response, graphical, calculation and extended-open-response questions. There are 5 marks of calculation questions in Section B.

COMPONENT 2: Non-Examined Assessment (NEA)

Students will undertake a project based on a contextual challenge set by the exam board in the summer of year 10. The project will test students' skills in the following areas:

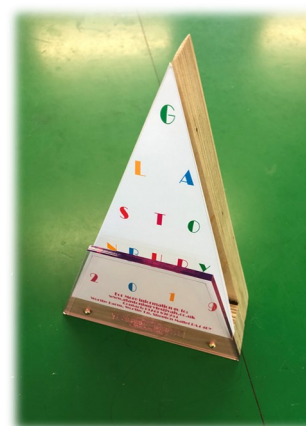
Investigate - This includes investigation of needs and research, and a product specification.

Design - This includes producing different design ideas, review of initial ideas, development of design ideas into a chosen design, communication of design ideas and review of the chosen design.

Make - This includes manufacture, and quality and accuracy.

Evaluate - This includes testing and evaluation.

You will be required to choose one of six challenges and analyse it on an individual basis. Having selected a contextual challenge to work within, you will develop a range of potential ideas and then realise one through practical making activities, including CAD. The project will allow you to apply knowledge and understanding in a product development process to investigate, design, make and evaluate your prototype. This unit is an internally assessed, non-examined assessment marked out of 100.



WHY CHOOSE DESIGN & TECHNOLOGY?

- D&T provides opportunities to engage in activities that are challenging, relevant and motivating.
- D&T prepares you for citizenship in a technological society through investigating, disassembling and evaluating products, looking at their applications. Completing tasks that develop your skills and knowledge of; materials and components; systems and control, quality control and health and safety.
- D&T provides you with great opportunities to apply valued judgements of an aesthetic, economic, moral, social, and technical nature to your work as well as the work of past and present designers.
- D&T improves your verbal and graphical communication skills, including modelling skills, to help your thinking and ability to design successful products.
- D&T facilitates opportunities for teamwork, working together to achieve the end goal.
- D&T brings enjoyment, satisfaction and a sense of purpose, whilst enabling you to feel that you can play a constructive role in a technological society.



STUDYING GCSE DESIGN & TECHNOLOGY COULD LEAD YOU INTO ONE OF THE FOLLOWING CAREERS?

Architect	£35k-£90k+	Product Designer	£22k-£48k+
Advertising	£25k-£90k+	Automotive Designer	£25k-£49k+
Graphic Designer	£25k-£60k+	Mechanical Engineer	£25k-£48k+
Multi Media Designer	£25k-£70k+	Structural Engineer	£27k-£50k+
Web Designer	£25k-£70k+	Furniture Designer	£25k-£49k+
Illustrator	£25k-£46k+	Interior Designer	£25k-£60k+
Designer	£20k-£49k+	Lighting Designer	£25k-£56k+

Others include:

Footwear Design, Design Education, Fashion Design, Textile Design, CAD Technician

LEARNING OUTSIDE OF THE WORKSHOP

Towards the end of the summer term you will have the opportunity to learn outside of the workshop through a visit to the **'New Designers'** exhibition based in the Business Design Centre, Islington. Here you will be exposed to cutting edge undergraduate work from the best design universities in the country and therefore increase your awareness of different design careers whilst improving your creative thinking.



WHAT OUR STUDENTS HAVE TO SAY:

"D&T GCSE helps enable your creative side and express yourself in a way that no other subject can. It is the most fascinating and innovative subject whilst still being enjoyable."

Anna (Year 11)

"I think D&T is a good subject to take if you're interested in a creative career, such as interior design, architecture etc. It helps develop skills that could be used anywhere in life, such as problem solving. When designing our own products for example, we discover problems, which then make us think outside the box to solve them. This is helpful for ANY career, even if it isn't related to D&T. However, there is quite a bit of work involved, which is mostly done on computers. There's computing involved, such as CAD that we used to create your phone stands etc. Overall, I think D&T is a good subject to take, despite the work involved, because the outcomes at the end: career wise, skills, etc are worth it for later on in life."

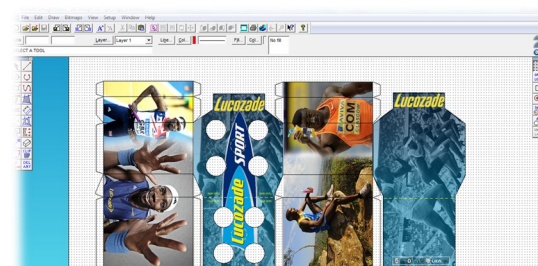
Mia (Year 11)

"Design & Technology is an amazing subject and the staff in the D&T department were the most kind and supportive. D&T was an integral part of my experience at Coopers' Coborn and I am continuing to study it now."

Rachel (past student)

"Through studying D&T at GCSE I have been able to develop skills and qualities which will I am able use, not just in the world of design, but in everyday expects of life from working in a team, to problem solving when giving limited options. The teaching staff constantly encouraged and always pushed me to my limits, enabling me to design and create a wide variety of products through their own knowledge and experience."

Jed (past student)



After studying GCSE D&T with us we want you to have become modern designers who have the ability to design new creative and sustainable products.

A sign of the modern technological age in which we live is that human actions have had a negative impact on our environment. New products provide solutions rather than add to the existing problems of extraction and use of natural resources, pollution from manufacturing and disposal of large amounts of waste products. Good design is vital to our world and economy and so it is our aim to develop a passion in you for designing your future.

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