# Design and Technology: Product Design

# A level

## What will I study and learn?

We will start by pushing your design skills to new heights and broaden your knowledge and understanding of the subject. We will introduce you to higher level CAD, quality iterative development and rendering skills. You will investigate design needs, social, cultural, environmental and economic influences on design and technology to increase your knowledge and understanding of a wide range of modern and traditional materials and processes.

These skills will be applied through an iterative approach to designing and making that requires you to develop and use your creativity and imagination to manufacture prototypes that solve real and relevant problems. You will also need to consider others' needs, wants and values while designing and making.

Product Design at A level focuses on simulating real-world practice through the design of commercial and industrial products. You will develop a detailed understanding of the design process, materials and their applications, knowledge of production methods and an understanding of the issues of quality, cost and marketability.

The DT Department offers a great deal of support. You will have open access to staff and machinery. Your learning will be underpinned by ongoing feedback from skilled practitioners. Staff in the Department have backgrounds in engineering, product design, and architecture, including a co-author of the course and revision guide and the Principal Moderator of AS DT for the exam board.

#### How will I be assessed?

The course is linear, which means that all three components will be taken at the end of the Upper Sixth:

#### **Examinations**

- Principles of Design (26.7%)
- Problem solving (23.3%)

You will need to demonstrate and apply knowledge and understanding of technical principles and the principles of designing and making in both papers. Analytical skills and the ability to evaluate outcomes and consider wider issues in design technology will also be assessed.

#### Non-examined assessment (NEA)

You will be required to undertake an iterative design and make project that meets the needs of a user or target marker. You must produce a final prototype based on the design brief you have developed, along with a digital design folder.

### **Future opportunities**

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries. Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers. Students often go on to undertake undergraduate degree courses ranging from Product and Industrial Design to Architecture, CAD Design or engineering disciplines.

#### **Entry requirements**

A grade 7 in Design and Technology would provide a suitable basis, but it is not essential that you have taken DT before. A good grade in related subjects, evidence and high levels of motivation will likely secure you a place on the course. It is essential that you understand and are prepared for the rigorous coursework components of the A level. You will also be selfmotivated, independent and capable of self-directed study.

#### Want to know more?

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Exam Board: www.OCR.org.uk





I joined in the Lower Sixth and was blown away by the opportunities available from the industry-level facilities for DT."

Millie Cardinal, OB 2022

Courses: Business Studies, Design and Technology, and Biology