

A Level D and T: Product Design



➤ Introduction

A Level Design & Technology in Product Design is a continuum from the GCSE in Design and Technology. It is essential that students applying for the A Level course have a genuine interest in D&T, a diligent and methodical approach to their studies.

The 2 year course is designed to equip students with design skills for the future, recognise design needs and develop an understanding of how global issues and the latest technologies have an impact on the world around them. Students learn and apply key design skills that prepare them for the modern world. They develop confidence to take design risks through the encouragement of innovation and creativity and further their understanding of new and emerging technologies

➤ What will I learn?

In an A-level Product Design course, you will learn to design and make 3D products by developing skills in CAD software, model-making, and prototype development. You'll also gain theoretical knowledge by studying the historical, social, cultural, environmental, and economic influences on design and its impact. The course is assessed with a 50% non-exam assessment (NEA) for your practical project and 50% from written exams.

Practical and creative skills

- Design and modelling: Learn to generate ideas, develop concepts, and create prototypes through both hands-on model-making (using materials like foam and cardboard) and computer-aided design (CAD).
- Manufacturing processes: Develop practical skills in manufacturing and materials.
- Visual communication: Improve your ability to present ideas through techniques like sketching, marker rendering, and 3D drawings.

Theoretical and critical thinking

Design history and theory: Investigate how design has been influenced by various factors, such as historical, social, cultural, environmental, and economic forces.

➤ How will I be assessed?

Component	Type	Duration	Weight
Principles of Design Technology	Exam	2hrs 30mins	50%
Independent Design and Make Project	NEA		50%

Key Information:

The first component covers the Principles of Design and Technology. It covers the following topics: materials, performance characteristics of materials, processes and techniques, digital technologies, factors influencing the development of products, effects of technological developments, potential hazards and risk assessment, features of manufacturing industries, designing for maintenance and the cleaner environment, current legislation, information handling, modelling and forward planning and further processes and techniques.

The second component is an independent design and make project. Students produce a substantial design, make and evaluate project which consists of a portfolio and prototype. There are 4 parts to the assessment covering the identification of a design problem, developing the design, making the prototype and evaluating both the design and the final prototype. The investigation report is internally assessed and externally moderated.

➤ Other subjects?

Art and Design, Engineering, Mathematics and other creative subjects strongly complement this course – both in content cross over and skills .

➤ Future Careers

The course enables progression towards degrees and careers in a wide range of Design and Technology industries such as: advertising, architecture, construction, carpentry, engineering, graphic design, media, manufacturing, marketing, motor vehicle design, repair, product design, sales and many others.

➤ Course Information

Course Code - 7552

Examination Board - AQA