

AQA A Level Design & Technology Product Design 7552

Why study Design & Technology?

Design & Technology is an exceptionally creative and thought-provoking qualification which gives students the practical skills, theoretical knowledge and confidence to succeed in many kinds of careers, including those in the creative industries.

Students will gain a real understanding of what it means to be a designer, product developer and engineer alongside the knowledge and skills sought by higher education and employers.

Design & Technology is uniquely placed as it combines practical skills and subject specific knowledge with engineering, mathematics, science, business studies, computer science, Art and Design and History knowledge.

What are the entry requirements?

- Grade 6 and above in DT
- Grade 6 in Mathematics and above if DT not studied at GCSE

What will I study?

A-level Design and Technology requires students to engage in both practical and theoretical study. This specification requires students to cover design and technology skills and knowledge as set out below. These have been separated into:

- technical principles
- designing and making principles

In addition you will complete a design and make task and produce a final prototype based on a context and design brief developed by you.

You will enjoy this course if...

- you enjoy solving real life problems and seeing a project through from first design ideas to the final prototype.
- you enjoy applying your maths and science knowledge to solve problems similar to those you will be facing in a working environment.
- you enjoy putting your learning into practice by producing prototypes of your choice.

How will my work be assessed?

Paper 1 – written exam

2 hours, 100 marks, 25% of A-level

Technical principles

Designing and making principles

Specialist knowledge

Questions: mixture of short answer, multiple choice and extended response questions.

Paper 2 – written exam

2 hours, 100 marks, 25% of A-level

Section A: Product analysis - 40 marks. Up to six short questions based on visual stimulus of products.

Section B: commercial manufacture – 60 marks. Two extended response questions worth a total of 30 marks each.

Non-exam-assessment (NEA)

100 marks, 50% of A-level, approximately 40 hours in duration

Written or electronic portfolio with photographic evidence of final outcome

The aim of A-level Design & Technology is for student to:

- be open to taking design risks, showing innovation and enterprise whilst considering their role as responsible designers and citizens
- develop intellectual curiosity about the design and manufacture of products and systems, and their impact on daily life and the wider world
- work collaboratively to develop and refine their ideas, responding to feedback from users, peers and expert practitioners
- gain an insight into the creative, engineering and/or manufacturing industries
- develop the capacity to think creatively, innovatively and critically through focused research and the exploration of design opportunities arising from the needs, wants and values of users and clients
- develop knowledge and experience of real world contexts for design and technological activity
- develop an in-depth knowledge and understanding of materials, components and processes associated with the creation of products that can be tested and evaluated in use
- be able to make informed design decisions through an in-depth understanding of the management and development of taking a design through to a prototype/product
- be able to create and analyse a design concept and use a range of skills and knowledge from other subject areas, including maths and science, to inform decisions in design and the application or development of technology
- be able to work safely and skilfully to produce high-quality prototypes/products
- have a critical understanding of the wider influences on design and technology, including cultural, economic, environmental, historical and social factors
- develop the ability to draw on and apply a range of skills and knowledge from other subject areas, including the use of maths and science for analysis and informing decisions in design.