For a future without limits
Ernest Bevin Sixth Form

A Level - Design & Technology

Why study D&T? To reshape the world and make it better.
Lead practitioners explain what is D&T and why do we need it

What is Design Technology?

Everything we use has been designed by a creative individual or team. We can see it all around us. Design and Technology is about designing and creating useful products that meet the needs of a target market or user. Why should you study Design and Technology A-level?

* A different way of learning.
* A real appreciation of the world in which we live.
* A highly creative subject with lots of problem solving.
* A wide range of transferable skills.
* It could lead to a wide range of future Higher Education courses and potential career choices.

How will you be assessed?

The Pearson Edexcel Level 3 Advanced GCE in Design and Technology consists of one externally-examined paper and one non-examined assessment component. Students must complete all assessment in May/June in any single year.

What will you study?

Component 1: Principles of Design and Technology
Written examination; 2 hours 30 minutes
50% of the qualification
120marks
Content overview

Topic 1:   Materials
Topic 2:   Performance characteristics of materials
Topic 3:   Processes and techniques
Topic 4:   Digital technologies
Topic 5:   Factors influenci ng the development of   products
Topic 6:   Effects of technological developments
Topic 7:   Potential hazards and risk assessment
Topic 8:   Features of manufacturing industries
Topic 9:   Designing for maintenance and the cleaner environment
Topic 10: Current legislation
Topic 11 : Information handling, Modelling and forward planning
Topic 12: Further processes and techniques.

Component 2: Independent Design and Make Project
Non-examined assessment

50% of the qualiflcatlon
120 marks
Content overview

• Students Individually and/or In consultation with a client/ end user Identify a problem and design context.
• Students will develop a range of potential solutions which include the use of computer aided design and evidence of modelling.
• Students will be expected to make decisions about the designing and development of the prototype in conj unction with the opinions of the cl ient/end user .
• Students will realise one potential solution through practical making activities with evidence of proj ect management and plan for production.
• Students will incorporate issues related to sustainability and the impact their prototype may have on the environment
• Students are expected to analyse and evaluate design decisions and outcomes for prototypes/ products made by themselves and others
• Students are expected to analyse and evaluate of wider issues in design technology, including social, moral, ethical and environmental Impacts.

Getting ready to start your A Level Design Technology course

Task1: Watch this inspirational TEDx Talk by Christiaan Maats on **How Product Design can change the world**

Task2: Take part in this fun and interactive TED talk presented by Graham Shaw called : **Why people believe they can't draw.**
Participate: Build-up your drawing confidence by drawing the different characters demonstrated in the video with a pen/pencil and paper.
Extension: Continue to build on your drawing confidence by creating your own characters based on famous people just like the Albert Einstein example. This could then lead onto having a go at drawing a range of objects that you would normally find around the home. Try experimenting by drawing a range of different shapes in 3D. Watching this video will offer extra support: **How draw 3D shapes—Exercise for Beginners**

Task3: Explore more interesting areas of design by watching one more of the short Ted Talks.

Creative thinking: How to get out of the box and generate ideas. Write a summary of the talk in less than 250 words and include your opinion of it.

Task4: Having watched the previous video on creative thinking, take 'an out of the box' approach by looking at an everyday product (for example a watch, a phone or a pencil case) and re-design or re-invent these products. Put you ideas on paper by drawing them with annotations that explain your ideas.

EXTENSION TASK: You may wish to find out more about the course we will be following by buying: **AQA A-level Product Design.**
This is an excellent book and is recommended to support your studies.