Design and Technology Linear A Level
Product Design

Examination Board: AQA

What is the course about?

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.

They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing products of their choice.

Through a combination of traditional lessons, research tasks, practical investigations and practical tasks 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.

Course structure and units:

Assessment

Unit	Assessment	Time	Weighting
Paper 1	Core technical principles and core designing and making principles.	**2 hours**	**100 marks** **25% of total A Level**
Paper 2	Specialist knowledge, technical and designing and making principles.	**2 hours**	**100 marks** **25% of total A Level**
Non Examined Assessment	Practical application of technical principles, designing and making principles and specialist knowledge.	**45 Hours**	**100 marks** **50% of total A level**

Subject Content

- Materials and their applications
- The requirements for product design, development and manufacture
- Design Communication
- Digital design and manufacture
- Efficient use of materials
- Health and Safety
- Feasibility Studies
- Design for manufacturing, maintenance and repair
- Protecting designs and intellectual property
- Enterprise and marketing in the development of products
- Design methods and processes
- How technology and cultural changes can impact on the work of designers
- How to evaluate products, taking into account the views of potential user

- Design Processes
- Critical Analysis and Evaluation
- Selecting appropriate specialist tools, techniques and processes
- Accuracy in design and manufacture
- Responsible design
- Design for manufacture
- National and international standards in product design
- Performance characteristics of materials
- The use of adhesives and fixings
- The use of surface finishes and coatings
- Forming, redistribution and addition processes
- Industrial and commercial practice
- Modern manufacturing systems

Non Examined Assessment

- Students will be required to undertake a small-scale design and make task and produce a final prototype based on a design brief produced by the student. The context of the task will be set by AQA and allow students to select from a list issued to the school. The contexts will change every year and will be released on 1 June in the year prior to the assessment being submitted.
- With reference to the context, students will develop a specific brief that meets the needs of a user, client or market.
- Students must produce a final prototype based on the design brief they have developed, along with a written or digital design folder or portfolio.
- Students must produce a final prototype based on the design brief that they have developed. Students should produce a concise folder. We recommend that this folder should not exceed 45 pages.