# Design and Technology 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** | Technical principals | **2.5 hours** | **120 marks**<br>**30% of total A Level** |
| **Paper 2** | Designing and making principals | **1.5 hours** | **80 marks**<br>**20% of total A Level** |
| **Non Examined Assessment** | Practical application of technical principles, designing and making principles. | **45 Hours** | **100 marks**<br>**50% of total A level** |

**Subject Content**

| | |
|---|---|
| • Materials and their applications<br>• The requirements for product design, development and manufacture<br>• Design Communication<br>• Digital design and manufacture<br>• Efficient use of materials<br>• Health and Safety<br>• Feasibility Studies<br>• Design for manufacturing, maintenance and repair<br>• Protecting designs and intellectual property<br>• Enterprise and marketing in the development of products<br>• Design methods and processes<br>• How technology and cultural changes can impact on the work of designers<br>• How to evaluate products, taking into account the views of potential user | • Design Processes<br>• Critical Analysis and Evaluation<br>• Selecting appropriate specialist tools, techniques and processes<br>• Accuracy in design and manufacture<br>• Responsible design<br>• Design for manufacture<br>• National and international standards in product design<br>• Performance characteristics of materials<br>• The use of adhesives and fixings<br>• The use of surface finishes and coatings<br>• Forming, redistribution and addition processes<br>• Industrial and commercial practice<br>• Modern manufacturing systems |

# Design and Technology A Level - Product Design (cont.)

**Non Examined Assessment**

- Students must undertake a design and make task and produce a final prototype based on a context and design brief developed by the student.

- The Brief must be of an appropriate level of complexity and contain a degree of uncertainty of the outcome so that students can engage in an iterative process of designing, making, testing and evaluating.

- Students must produce a written or digital design folder clearly evidencing how the assessment criteria have been met together with photographic evidence of the final manufactured prototype outcome.

- Students should produce a concise folder. The exam board recommend that the folder should not exceed 45 A3 pages or equivalent.