

A level Product Design (Design Engineering)

A-Level Product Design (Design Engineering) requires you to engage in both practical and theoretical study. This creative and thought-provoking qualification gives you the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative Industries and Engineering.

You will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put that learning in to practice by producing prototypes of your choice. You will gain a real understanding of what it means to be a design engineer, whilst gaining the knowledge and skills sought by higher education and employers.

Previous study of Design Technology or Engineering is an advantage, but not a necessity. When you start in September, we will provide you with a textbook for the 2 years, specifically designed for your course (AQA level Product Design).

Overview of Course:

Exam Board: AQA <https://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552/specification-at-a-glance>

Assessment Structure:

All assessments and exams are completed in Year 13. We do not offer an AS Level in Product Design:

- Paper 1 (Technical Principles). 2 hours and 30mins. 120 marks. 30% final grade. Mixture of short answer and extended response questions
- Paper 2 (Designing and Making Principles)1 hour and 30mins. 80 marks. 20 % final grade. Mixture of short answer and extended response questions Section A Product Analysis (30 marks). Section B Commercial Manufacture (50 marks)
- NEA (Practical application of technical, designing and making principles). Substantial design and make project (Portfolio of evidence of final prototype) 100 marks. 50 % final grade.

Preparation:

Prior to starting the course, you need to investigate the following Design Technology websites. These are not exhaustive, but do cover the foundation knowledge gained during the study of GCSE Design Technology or Engineering. This is especially important if you didn't study the subject at GCSE level:

1. BBC Bitesize Design Technology:

<https://www.bbc.co.uk/bitesize/examspecs/zby2bdm>

2. Technology Student.com

http://www.technologystudent.com/despro_flash/NEW_GCSE3.html

3. Explore the technical principle subject content area here:

<https://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552/subject-content/technical-principles>:

4. Explore the Design and Make principles subject content here:

<https://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552/subject-content/designing-and-making-principles>

For Tasks 3 & 4 it would be useful to print these out or make your own table and assess your prior knowledge in each section. 'RAG' rating all these sections with **green** (good knowledge), **orange** (some knowledge) and **red** (no knowledge) highlighters in relation to your level of knowledge is essential before starting the course. It will allow your teacher to tailor the learning to your specific needs from day 1. Your teacher will ask for this information during the first week of the course starting.