



Design and Technology A-level

*We follow the AQA Design and Technology:
Product Design Specification 7552*

This is divided into 2 parts

50% Non-Examined Assessment (NEA) Coursework

50% theory, examined at the end of the course in 2 papers.

50% Non-Examined Assessment (NEA) Coursework

Practical application of technical principles, designing and making principles.

It is intended to be a substantial design and make project evidenced through a digital design portfolio which contains photographic evidence of the final prototype.

Pupils will complete a number of practice projects to give them insight into the layout, expected content and develop their skills and software use through the first term and a half of their L6

50% theory, examined at the end of the course in 2 papers.

Paper 1 - Technical principles

30% (120 marks) = 2 ½ hours

Paper 2 - Designing and making principles

20% (80 marks) = 1 ½ hours

Section A: 30 marks - Product analysis

Up to 6 short answer questions based on visual stimulus of product(s).

Section B: 50 marks — Commercial manufacture

Both papers have a mixture of short and long answer questions

Topics at A level include learning about

- *The Performance and Processing of:*
 - *Papers and Boards*
 - *Polymers*
 - *Woods*
 - *Metals*
 - *Composites*
- *Industrial practice*
- *Product design considerations*
- *Product design*
- *Design methods*
- *Design processes*
- *Responsible design*

Maths is approx. 15% of the theory papers, 7.5% overall. GCSE standard maths, mostly calculating volumes, areas, percentages waste etc

Useful subject combinations

There are some obvious routes having studied A level DT

Russell Group Universities consider DT A level as a useful 3rd A level with Maths and Physics for most Engineering courses, this is a traditional combination and one we are seeing increasingly in DT.

Some Architecture courses ask for a Maths / Physics A level route with either Art or DT, others require a less prescriptive selection of subjects, the majority require top grades.

Always check with UCAS and specific universities for subject preferences



Typical university courses undertaken by A level DT students

Engineering – most types

Architecture

Product and Industrial design

Fashion

Business

We have also had students studying Law, Economics etc as well as some who have applied for Oxbridge

Additional useful information

Previous Epsom College pupils have stated that the practical application of knowledge, communication, problem solving, planning, teamwork, evaluation and extensive school workshop experience has been very useful to them on these courses.

We use the same or similar software for DTP and CAD as students will find at university and pupils have access to a variety of 3D CAD software in preparation as suits their choice.

Personal devices: DTP on both macs and windows machines. 2D CAD only available on windows.

Pupils use the pupil share cloud facility to store their work and have the opportunity to download all of the software that we use.