

Design & Technology

What is the exam board and route?

Level 3 Advanced GCE in Design and Technology (Product Design) Edexcel (9DT0)

Subject Entry Requirements: Grade 6 in GCSE Design and Technology advised.

There are no prior learning or other requirements for this qualification. However, pupils who will benefit most from the A Level will have completed a GCSE qualification in the subject. External candidates or those who have not studied the subject at GCSE may be considered, particularly if they are committed and enthusiastic.

A discussion with the Head of Department is required to assess a prospective candidate's suitability in undertaking the course.

Subject outline

Creativity and innovation are at the heart of Design and Technology, and students are encouraged to take risks through developing their initiative. Requiring a multitude of skills, they are equipped for various career paths. From communicating ideas effectively to others to project management, pupils are prepared for many future avenues.

How is the course assessed?

One externally assessed written examination: 2 hours 30 minutes (50% of the qualification)

One non-examined assessment: Digital portfolio and prototype – approx. 60 sides of A3 paper (50% of the qualification)

Why study this subject?

Working in small classes, pupils receive comprehensive support to help them realise their design ideas. They are taught various strategies that promote good design practice and are encouraged to adopt an iterative design methodology for their projects. The department is thoroughly equipped, and pupils are shown how they can use the facilities to manipulate a variety of material areas. This includes engineering machines such as centre lathes through to contemporary computer-controlled devices such as the laser cutter and 3D printers. These workshops are accompanied by individual computer suites which allow pupils to develop their skills using the industry specific software, Solidworks.

Complementary subjects

Physics, Mathematics.

Possible careers

Product Design, Industrial Design, Automotive Design, Architecture, Engineering: Mechanical, Electrical, Civil, Aerospace, Materials etc., Construction Management, Project Management, Computer Aided Design and Manufacture.

Subject enrichment available

- STEM (Science Technology Engineering and Mathematics) competitions
- 'Inspiring Minds' event at Loughborough University
- Departmental Prefect
- Educational visits
- Daily support sessions
- Visiting speakers
- Leadership opportunities in Lower School co-curricular activities