

Design and Technology

Why study Design and Technology?

Design and Technology heavily influences the world around us, with careers in product design, architecture, and engineering all stemming from problem-solving and creative thinking. This subject encourages pupils to develop these skills by creating working solutions for problems by using various techniques, including critical thinking, visual communication, and practical work.

Entry Requirements

While there are no prior learning or other requirements for this qualification, it is beneficial for pupils to have studied the subject at GCSE, as it provides essential experience with assessment and develops necessary practical and graphical skills. However, it is possible for students to study the A Level without prior study of the subject; a discussion with the Head of Department is a prerequisite to assess a prospective candidate's suitability for undertaking the course.

Course Content

Theory Topics include:

- Materials, Processes and Techniques
- Digital Technologies
- Factors influencing the development of products
- Effects of Technology Developments
- Features of Manufacturing Industries
- Current Legislation
- Designing Maintenance and the Cleaner Environment

Relevance

Design and Technology is a highly relevant subject, as it equips pupils with skills to solve real-world problems and create innovative solutions, making it a valuable subject in today's world. With every item having been designed, whether it be consumer goods, vehicles or buildings, the subject equips pupils with the necessary skills to create effective solutions.

Career versatility

An A Level in Design and Technology can lead to careers in industrial design and technology, civil engineering, architecture, mechanical engineering, aerospace engineering, and business management, as it provides a strong foundation for university studies and future employment in these fields.

Academic flexibility and skills developed:

Design and Technology pairs well with subjects like Physics, Mathematics and Art, and develops key skills such as critical thinking, visual communication, practical work, and project management. These are highly valued by universities and employers, enabling pupils to integrate and apply their understanding and knowledge from the subject to multiple career areas.