



DESIGN & TECHNOLOGY: DESIGN ENGINEERING & PRODUCT DESIGN

Design and Technology in the Sixth Form is designed to encourage candidates to take a broad view of technology and design, to develop their capability to design and make products and to appreciate the complex relations between design, materials, manufacture and marketing.

The course also contains a section on communication methods, as graphics are an integral part of any design & technology work. In any design or technological related discipline it is important that candidates can communicate their thinking clearly and represent their ideas graphically.

The A-level Design & Technology: Design Engineering & Product Design courses provide students looking towards an engineering-based course in higher education with an exciting, challenging and practically orientated problem-solving course. The course is also a sound choice for students considering careers in architecture or one of the many design-related disciplines.

The department is housed in impressive purpose-built accommodation fully equipped for work in both materials and systems & control and includes the latest computer-aided design and manufacturing software and equipment. This allows pupils to model products on the computer prior to manufacture.

THE COURSE

Design Engineering A-Level 2 Year Course

Unit 1 - Two Written Exams: 1 hour 30 minutes (50% of total A-level marks)

Candidates answer three from a choice of six questions set on further study of the subject content. This paper will test the candidates' in-depth knowledge of the concepts taught throughout the course.

Unit 2 - Coursework: approx 65 hours (50% of total A-level marks)

An electronic portfolio to support the final product. High quality manufactured final product to suit a brief set by a client. A single, substantial design and make project using a combination of materials, systems and components.

A-level Design & Technology combines the best in both creative and practical applications of knowledge. It is the true cross-curricular nature of the subject that draws highly from other subjects and, in turn, contributes so much to the overall education of the candidate, especially in the fields of Science, Mathematics and Art.

Product Design A-Level 2 Year Course

Unit 1 - Two Written Exams: 1 hour 30 minutes (50% of total A-level marks)

Based primarily on Design and Manufacture and consisting of two sections.

Candidates answer three questions: one question from three in each section, plus a final question from either section.

This paper will test the candidates' in-depth knowledge of the concepts taught throughout the course.

Unit 2 - Coursework: approximately 65 hours (50% of total A-level marks)

An electronic portfolio to support the final product. High quality manufactured final product to suit a brief set by a client. Candidates submit evidence of a substantial designing and making activity using a combination of materials knowledge and manufacturing processes.

CAREERS

Possible career opportunities after a period of study in both subjects include:

Engineering

Architecture

Electronic Design

Product Design

Electrical Design

Graphic Design

3D Design

Interior Design

Advertising/Marketing

Computer Aided Design

Computer Aided Manufacture

Modelling and Visualisation