

Design Technology

A-Level

Overview

The course intends to reflect the demands of a truly modern and evolving society and enable students to apply themselves and give them the skills to succeed in their chosen pathway. Equipping students with design and problem solving skills for the future. Students will be able to recognise user needs and design solutions for these. Students also develop an understanding of how current global issues, including sustainability, emerging technologies, materials and production processes can impact on today's world. The course encourages creativity and innovation. At A level students will develop the confidence to innovate and produce a variety of justified and sophisticated creative solutions for contextual problems as they work through a realistic development of their own prototype product for a real life client/end user.

Why Study?

Studying Design & Technology would be highly appropriate for those considering careers in engineering, product design and the wider creative industries. The course directly builds upon knowledge and skills gained through GCSE Design and Technology.

Course Overview

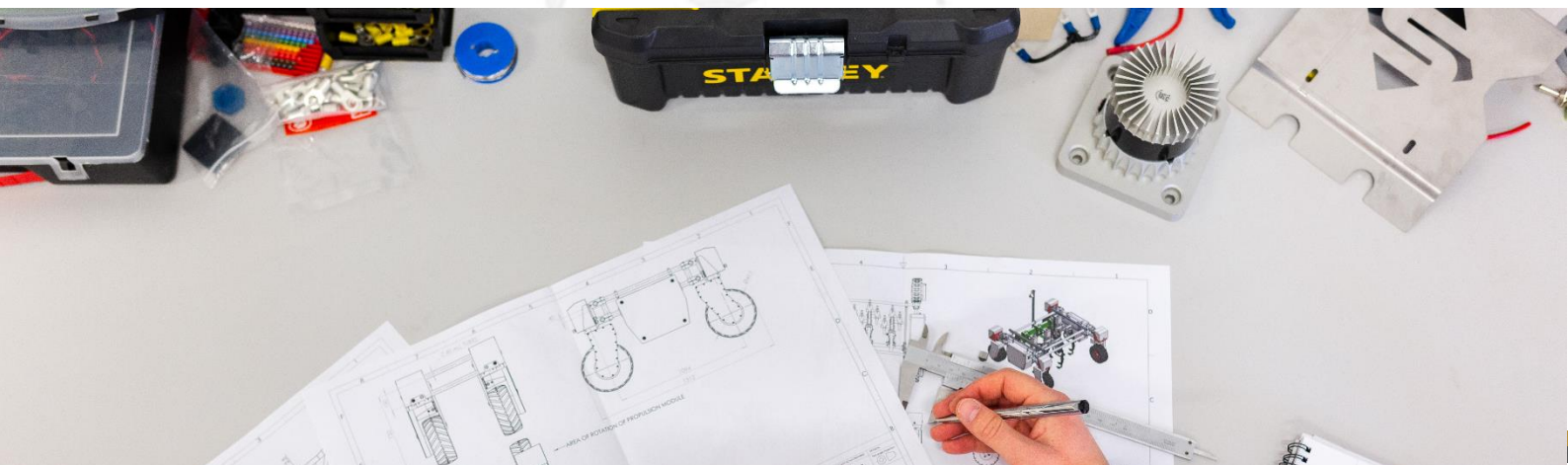
The course consists of two interrelated parts:

A written examination which focuses on the study of the Principles of Design and Technology

- Q Including, but not limited to: Materials, Processes and techniques, Material characteristics, Digital technologies, Design for maintenance and the cleaner environment, effects of technological developments, Legislation.

An independently completed Design and Make project in which students will:

- Q Individually and/or in consultation with a client identify a problem and design context.
- Q Develop a range of potential solutions, including the use of computer aided design and evidence of modelling.
- Q Make decisions about the designing and development of the prototype in conjunction with the opinions of the user group or client.





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- Q Realise one potential solution using practical making and project management skills.
- Q Design and make a prototype with regard to sustainability and the impact their design may have on the environment.
- Q Analyse and evaluate design decisions and outcomes for prototypes/products made by themselves and others.
- Q Gain an understanding of wider subject issues, including social, moral, ethical and environmental impacts.

The Examining Body for the Design and Technology (Product Design) Qualification is edexcel. Full details of the course are available through <https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/design-technology-product-design-2017.html>

Progression

Design and Technology is an excellent route to university-level engineering qualifications. You could study an HND, degree or advanced engineering or design & technology related Apprenticeship, or find employment. Alternatively, it can also lead to a degree and career in product design, however the skills learnt in the subject are relevant to many aspects of modern business.

Head of Department: Nicholas Hart

Email: nph@queenscollege.org.uk