DESIGN & TECHNOLOGY: Product Design

Entry Requirement: Students are expected to have achieved a Grade 6 or higher in Design and Technology at GCSE.

Examination Board: AQA 7552

Course Content and Assessment

Paper 1:
Technical Principles
30% of the A Level
2 hour 30 minutes written examination
120 marks

Paper 2:
Designing and making principles
20% of the A Level
1 hour and 30 minutes written examination
80 marks
Mixture of short answer and extended response questions.

Section A:

- Product Analysis: 30 marks
- Up to 6 short answer questions based on visual stimulus of product(s).

Section B:

- Commercial manufacture: 50 marks
- Mixture of short and extended response questions.

Non Exam Assessment (NEA):

Substantial Design and Make Project

50% of the A Level

100 marks

Practical application of technical principles, designing and making principles. Evidence is a digital design portfolio and photographic evidence of final prototype.

This course offers a natural progression from the GCSE specification. Students are familiar with the course structure and assessment criteria. Product Design is a creative and thought-provoking course that gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers, especially those in the creative industries. They investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put learning into practice by producing prototypes of their choice that satisfy real life situations. Students gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

The course is set out into two areas, developing theoretical knowledge and practical skills.

- ➔ technical principles
- ➔ designing and making principles.

The A Level course provides students with far greater opportunities to work independently and the freedom to select their own design context and client for their NEA.

Teaching and Learning Methods

A range of Teaching and Learning methods are adopted. Students are guided through a range of practical activities to develop the skills and techniques required to create their own designs. Independent working is encouraged whilst guidance is offered throughout the course.
There is a significant amount of technical understanding and practical workshop skills. This includes CAD/CAM OnShape, 3D printers and laser cutters.
There is some practical investigative work, where some materials will be provided by the school.
Theory lessons may involve practical elements as well as written studies.

Homework

There is an expectation that students work independently for a suggested time of 5 hours per week. Good organisational skills and a willingness to use time outside of lessons is required.

Trips and Visits

Design Museum and Industrial visits as and when available. Guest speakers working in Design related industry, including Chris Lane from the Dyson Institute.

Key Features

Design and manufacture of products using a range of materials supported by theoretical aspects. This course would provide degree preparation and entry, and career opportunities in Product Design, Engineering, Architecture, Graphic Design, Interior Design, Surveying, Illustrating and many more.