

Product Design

Pathway 2

Course description:

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industries. They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing products of their choice. Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

Qualifications required:

- In line with the entry requirements for a Pathway 2 subject.
- Grade 6 or above in a GCSE Design & Technology subject

Aims of the course:

- Develop intellectual curiosity about the design and manufacture of products and systems, and their impact on daily life and the wider world
- Work collaboratively to develop and refine their ideas, responding to feedback from users, peers and expert practitioners
- Gain an insight into the creative, engineering and/or manufacturing industries
- Develop the capacity to think creatively, innovatively and critically through focused research and the exploration of design opportunities arising from the needs, wants and values of users and clients
- Develop an in-depth knowledge and understanding of materials, components and processes associated with the creation of products that can be tested and evaluated in use
- Be able to create and analyse a design concept and use a range of skills and knowledge from other subject areas, including maths and science, to inform decisions in design and the application or development of technology
- Be able to work safely and skilfully to produce high-quality prototypes/products

Future prospects:

You can progress on to:

- Design degree courses, although this course is a particularly good introduction to a Product Design or Industrial Design related subject.
- A wide range of careers including design, engineering and architecture.

Student feedback:

'It has helped me to understand the design process and use my creative skills to develop an existing product.'

Subject Teachers:

Mr S Lane and Mr J Pinkney

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Features of the course:

- Efficient use, application and testing of materials
- Product development and improvement
- Inclusive design
- Ergonomics and anthropometrics
- How modern products are designed
- Social, Moral, Cultural and Environmental issues relating to designing and making
- Health and safety issues
- Manufacturing systems

A2 Level Units

Paper 1

25% of A level

Written exam – 2 hours

The core technical principles and core designing and making principles are assessed in a two hour written examination. The paper includes a mixture of short answer, multiple choice and extended response questions.

Paper 2

25% of A level

Written exam – 2 hours

Specialist knowledge, technical and designing and making principles are assessed in a two hour written examination. The paper includes a mixture of short answer, multiple choice and extended response questions. The paper is broken up into two sections:

Section A:

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

Section B:

- Commercial manufacture.
- Mixture of short and extended response questions

Non-exam assessment (NEA)

50% of A level

This is the practical application of technical principles, designing and making principles and specialist knowledge. It is a substantial design and make task which should take up to but not more than 45 hours in total. The evidence will be written or in a digital design portfolio, with photographic evidence of final prototype.

Methods of Assessment:

Both papers are marked externally.

The NEA is marked by the centre and moderated by the exam board.