A Level Design and Technology: Product Design at The Warriner School

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Entry Requirements:

It is preferable that you have achieved a Grade B/6 at GCSE (or equivalent) in Resistant Materials, Engineering, Graphic Products, Textiles, Product Design, BTEC Level 2 Fashion and Clothing (Pass).

Other subject specialisms / levels could be considered with consultation.

Course Outline

Product Design is ideally suited to creative, imaginative students who enjoy a challenge. The Product Design course is project based, with practical work being carried out to solve design problems. This course is ideal for students who enjoy the challenge of design and manufacture through creating functioning and prototypes. The design element is in the style of a portfolio that allows graphical and design process to be displayed as well as investigating real situations and products to develop something new. This course allows learners to focus their design and making skills to realise a final designed and manufactured outcome.

Students will enjoy this course if:

- They are a creative individual who wants to develop and sustain their creativity and innovative practice.
- They want to develop an understanding of contemporary design and technology practices, recognise the values inherent in design and technological activities, and develop critical evaluation skills in technical, aesthetic, ethical, economic, environmental, sustainable, social, cultural and entrepreneurial contexts.
- They aspire to be the next Conran, Dyson or Alexander McQueen.
- They enjoy the challenge of a practical and creative subject.

Trips and Costs:

Throughout the course we will be taking students out to see current exhibitions, design studios and university degree shows in order to challenge and inspire their thinking. Students will be expected to contribute financially to these trips.
Some of these trips may be away overnight. Students are expected to purchase a basic Graphical design kit in order for them to complete their studies, this can be done independently or through the school.

The assessment of the course is broken down into 2 components

Component 1: Design and Technology in the 21st Century

Written examination: 3 hours - 50% of qualification
Learners take a single examination in one of the following endorsed area: product design.

The examination includes a mix of structured and extended writing questions assessing learners' knowledge and understanding of:

• Technical principles
• Designing and making principles along with their ability to analyse and evaluate wider issues in design and technology.

Component 2: Design and make project

Non-exam assessment: approximately 80 hours - 50% of qualification
A sustained design and make project, based on a brief developed by the candidate, assessing the candidate's ability to:

• identify, investigate and outline design possibilities
• design and make prototypes
• analyse and evaluate design decisions and outcomes, including for prototypes made by themselves and others

The design and make project will be based within the same endorsed area as the written examination. A level students, have freedom to investigate and use the process of iteration before deciding upon a final design brief.

Further Details:

This specification enables learners to work creatively when designing and making and apply technical and practical expertise, in order to:

- be open to taking design risks, showing innovation and enterprise whilst considering their role as responsible designers and citizens
- 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 knowledge and experience of real world contexts for design and technological activity
- 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 make informed design decisions through an in-depth understanding of the management and development of taking a design through to a prototype/product
- be able to create and analyse a design concept and use a range of skills and knowledge from other subject areas, including mathematics 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
- have a critical understanding of the wider influences on design and technology, including cultural, economic, environmental, historical and social factors
- develop the ability to draw on and apply a range of skills and knowledge from other subject areas, including the use of mathematics and science for analysis and informing decisions in design

Further Education and Employment

The Product Design course has been developed to provide a broad educational basis for further training, further education or for moving into appropriate employment within the design sector. Students who complete the qualification will be well equipped to move on to degree courses, BTEC Higher National

Diplomas or NVQs. It also offers good credentials for direct employment.

Possible careers after this could include:

Exhibition Designer
Marketing
Fashion design
Furniture design
Interior design
Jewellery design
Model making
Product marketing
Printing
Product Design in theatre/television/film
Teacher
Automotive and Vehicle design
General product Design and Innovation