

DT Product Design

Qualification: A-Level Design Technology
Additional Entry Information: GCSE Maths grade C
GCSE English Language grade C
plus
GCSE Product Design/Engineering/Construction grade C equivalent or above.
Speak to **Mr G Davies or Mr Canale** for more information.

What do students need to know or be able to do before taking the course?

It is desirable that students wishing to take this subject have prior knowledge of the following areas in design – Manufacturing systems, Materials and their properties and technical drawing or an appreciation for the extensive design process all products go through or a passion/interest for the subject and are keen to learn. Students will be required to commit to developing design skills to an adequate standard.

What will students learn on this course (skills and course content)?

The AS and A Level course will encourage you to:

- Develop knowledge and reflective practices in order to work with tasks that are challenging and require definition.
- Develop and sustain your creativity and innovative design.
- Recognise and overcome challenges and constraints when working towards the production of high-quality products.
- Develop a critical understanding of the influences of the processes and products of design and technological activities from a contemporary and historical perspective.
- Utilise a range of skills and knowledge from other subject areas.
- Draw on and apply knowledge, understanding and skills of manufacturing processes from a workshop or commercial background to a range of design and technology activities.
- Develop an understanding of CAD/CAM/CNC and Robotic practices.
- Use digital technologies and information handling skills to enhance your design and technological capability.
- 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.

What sort of student is this course suitable for?

Creativity, Innovation, Curiosity of design, Practical aptitude, Keen to develop and experiment.

What kind of work will students need to be able to do outside of lessons?

- Conduct a range of research methodologies and apply findings to coursework.
- Draw, design, prototype, 3D model and test ideas to evolve a product from start to finish.



- Test design prototypes with the end user/ target audience groups.
- Critically evaluate/test their work.

What is the course content and how is this assessed?

Year 1 – AS Level - 40%

AS Unit 1 - written paper 2 hours - 20%

AS Unit 2 - Coursework 50 hours - 20%

Year 2 - A level - 60%

A Level - Unit 3 written paper 2.5 hours - 30%

A Level - Unit 4 Coursework 50 hours - 30%

What could students go on to do at the end of this course?

A career in the design industry can lead to many opportunities within the following sector i.e. industrial design, architecture, graphic design, interior design, bio medical engineering, automotive design, engineering, stage and set design, etc. Students acquire such an array of a skill set that often our students go onto university or obtain an excellent apprenticeship with a prestigious company such as Renishaw, Aston Martin or General Electric to name a few.

