

Design & Technology *at MSJ Sixth Form*



Design & Technology is a course based around the study and creation of innovative modern design. Outcomes of the course can be split into two main categories; academic and practical.

On the academic side you can expect to develop and sustain skills in critical thinking, analytical thinking, innovation and creativity, linking to business and economic theory. This is achieved through in-depth analysis of existing products on the market, in order to improve their design, and identify gaps in the market for new products.

Practical skills can be developed through learning design techniques and applying your academic study to create innovative designs. You will make these ideas a reality using workshop tools and equipment.

TO PURSUE THE A LEVEL COURSE SUCCESSFULLY, PUPILS IDEALLY NEED A MINIMUM OF:

GCSE D&T Grade 5

WHAT DOES THE COURSE INVOLVE?

The course will involve both practical and theory lessons and you will apply your learning through small focussed tasks as well as larger projects. You will explore the history of design by looking at designers and design eras. As well as this you will study manufacturing techniques, commercial practices and material properties. The course will contain detailed theory lessons leading to a written examination and assessed practical work; you will have the opportunity to use modern CAD/CAM manufacturing machinery, such as a Laser Cutter and 3D Printer.

IS IT THE RIGHT COURSE FOR ME?

What skills will I need?

You should be open to taking design risks, showing innovation and enterprise whilst considering your role as a responsible designer and citizen. You will want to use creativity and imagination when applying design processes to develop and modify designs, and to design and make prototypes/

products that solve real world problems, considering your own and others' needs, wants, aspirations and values. Mathematical skills will be called upon as you engineer products. You should have good IT skills and be able to work independently.

WITH WHICH OTHER SUBJECTS DOES IT WORK BEST?

A Level Design & Technology works well with Maths, Science (particularly Physics), Geography, History, Business and Economics. This course also works well with the Young Enterprise scheme offered at MSJ.

WHAT ARE THE POSSIBLE CAREER PATHWAYS?

A Level Design & Technology can lead to further study in creative, technological, and business areas, such as Product Design, Architecture, Engineering, Manufacture and Art and Design.

HEAD OF SUBJECT

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EXAM BOARD

WJEC EDUQAS

HOW IS IT ASSESSED?

Design & Technology is split equally with non-examined assessment carrying 50% and the examination carrying 50% of the total marks.

The practical work will be formed around an investigation and analysis of a problem within a context, and the needs, wants and values of users, to define a design opportunity leading to the production of a design brief and specification to direct, inform and evaluate their design practice.