Design & Technology (Product Design or Textile Products) GCSE (Optional)

Board: AQA

GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise.

Our GCSE allows students to study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth. Much of the course content is the same (e.g. product obsolescence and sustainability) whether students choose to focus on Product Design or Textile Products and often these sessions are delivered across both material areas. However, students will spend a significant proportion of the course focused on their specific material areas of timbers and polymers (Product Design) and textiles (Textile Products).

Skills

Design and Technology combines the skills and techniques from Resistant Materials, Systems and Control, Textiles and Graphic Products. This allows you to design and make products with creativity and originality, using a range of materials and techniques.

During your classroom lessons and industrial visits, you will learn how to develop your creative thinking and problem-solving skills to become more resourceful, innovative and enterprising. You will develop a critical understanding of the impact of Design and Technology on daily life and the wider world with consideration given to the sustainability and the environmental impact of your designing.

Knowledge

You will learn to design and make products that solve genuine, relevant problems within different contexts whilst considering your and others' needs. To do this effectively, you will acquire a broad range of subject knowledge that draws on previous Design and Technology disciplines.

In Year 10, we teach following the iterative design process that allows you to 'explore, create and evaluate' following practices and strategies used by the creative, engineering and manufacturing industries. This is through a number of focused projects where you are encouraged to take risks and make mistakes.

In Year 11, you will independently design and make a product of your own choice in response to some contexts set by the exam board. You will be expected to draw on a wide base of knowledge in order to demonstrate a range of skills from researching and analysis of information to creative design solutions presented in a range of mediums, including use of our 3D print farm, laser cutter and sublimation printer.

Design and Technology is a great steppingstone into Advanced Level Qualifications such as Product Design, Manufacturing, Textiles and Design and Engineering. A Level Product Design and Textiles is considered an essential qualification into any of the Design and Manufacture industries.

Assessment

Coursework

You will start your coursework at the end of Year 10 and complete it throughout most of year 11 (50% of the final grade). This is a single 'design and make' activity which is not restricted by materials or processes, allowing you the freedom to utilise any resources and facilities appropriate to your design developments and final outcomes. This is a fantastic opportunity to explore your personal interests and not be limited.

Examinations

There is one theory exam at the end of Year 11 (50% of the final grade) divided into two sections:

1) **Core** knowledge of Design and Technology principles that demonstrates your broad understanding of key principles.
2) '**In-depth**' knowledge that allows you to focus more directly on **at least one** main material category, or design engineering.

For further details, please see Mrs. Jordan Head of Dept