Design and Technology

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Why King's?
Facilities
- Full prototyping facilities in 3 workshops, 2 design/IT rooms and a design studio.
- Specialist/industry standard software.
- Extensive AV resources and department library.
- Rapid prototyping facilities including laser cutter, multiple 3D printers and VR technology.

Highlights
- Annual trips to Morgan Cars and Jaguar Land Rover.
- Regular recipients of Arkwright Scholarships.
- All exam students work with a genuine client.
- F1 in schools competition

Academic Performance

100% A*-C
Design & Technology A Level

88% 9-7
Design & Technology GCSE

2022 Results

The Design and Technology Department is well resourced and has an impressive range of equipment and assistance on offer. Alongside developing traditional designing skills, students make full use of CAD and 3D modeling software, often outputting work to the laser cutter or class set of 3D printers.

In Years Seven to Nine, DT pupils study and work with a variety of materials and concepts. Through a broad foundation course, consisting of a variety of projects, pupils build skill levels and confidence in both the workshop and design room, whilst working with the latest prototyping technology. As they progress, pupils can experiment with materials, concepts and manufacturing processes to help develop their understanding of designing, making and prototyping. At GCSE and A Level, students work with great accuracy and detail in both their practical and written work. At this stage, work is closely related to industrial practice and students design work to a client's brief and make use of an industrial contact.

Design and Technology has a huge relevance to today and improving tomorrow. It is an appropriate first choice for those wishing to pursue higher education in any Design and Technology related course such as Product or Industrial Design, Interior or Fashion Design, Graphic Design, Architecture or Engineering. In DT, students relish their learning and without exception achieve far more than they ever thought possible.

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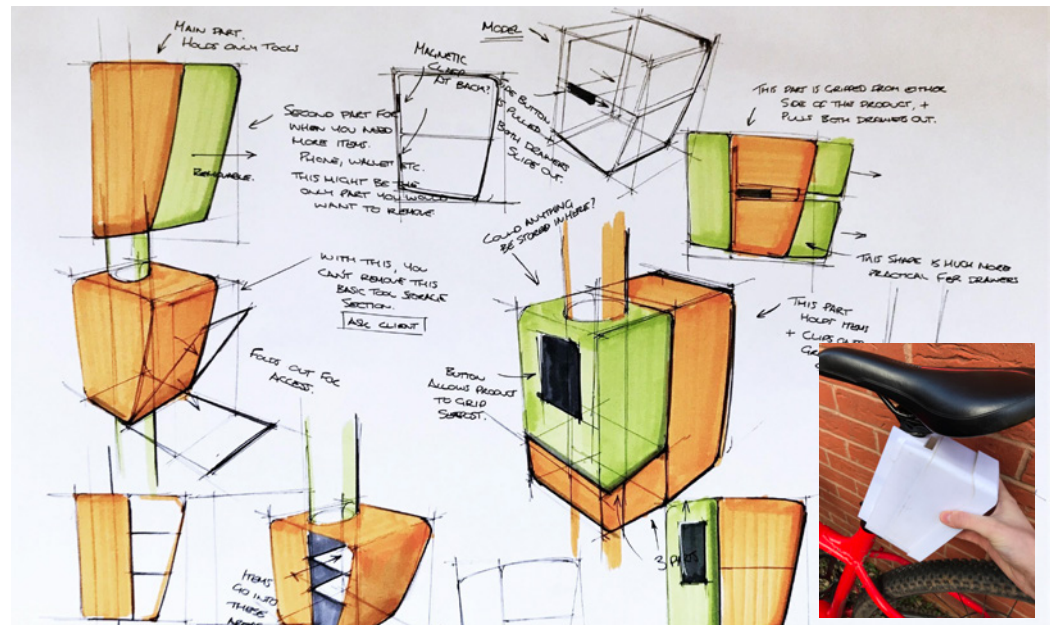
We run annual Sixth Form trips to Morgan Motor Cars and Land Rover to witness the differences between batch and mass manufacture. We have regular recipients of the Arkwright Scholarships. We have a strong pedigree in the Jaguar Land Rover 4x4 in Schools competition and have recently been National winners and World final winners.

GCSE Design 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.

The subject allows Design Technology 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.

Assessment is through an Exam Paper covering core technical principles, specialist technical principles and designing and making principles. The paper is 2 hours long, carries 100 marks and is worth 50% of the GCSE.

In addition, students produce a piece of Non-Examined Assessment (coursework). This assesses the practical application of core technical principles, specialist technical principles and designing and making principles. This is assessed through the production of a project which lasts approximately 30-35 hours. It also carries 100 marks and is worth 50% of the GCSE. Students will produce a prototype and a portfolio of evidence. The work will be marked by teachers and moderated by AQA.

A Level Design Technology is designed to offer students the opportunity to develop and sustain their own innovation, creativity and design and technology capability, to recognise constraints and to produce high quality products.

Assessment is through an Exam Paper covering the principles of Design Technology. The paper is 2 hours and 30 minutes long and is worth 50% of the qualification.

The other 50% comes from the Non-Examined Assessment.

Students, in consultation with a client/end user identify a problem and design context before developing a range of potential solutions including the use of computer aided design and evidence of modelling. Following development, the student will realise a solution through practical making activities. Following this, students are expected to analyse and evaluate design decisions and their prototype.

Who might be interested in Design & Technology – Product Design?
The course is designed to be either a complementary subject to Mathematics, Physics, Art and Design at AS or A Level, or a contrasting subject with English, History, Geography and Modern Languages. The subject is fully recognised by all universities and is an appropriate first choice subject for those wishing to pursue Further or Higher Education in any Design & Technology related course (such as Product or Industrial Design, Interior or Fashion Design, Graphic Design, Architecture, Engineering, etc).

For further information please visit the Design and Technology pages on our website

King's Worcester

www.ksw.org.uk