

## Design and Technology at KEVI HGS:

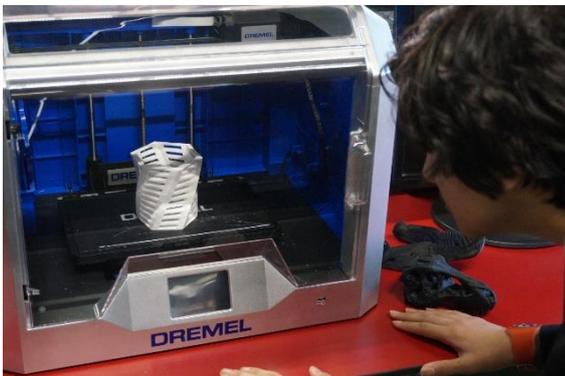
Through Design and Technology students will develop intellectual curiosity about the design and manufacture of products.

Students will explore, design, create and evaluate innovative solutions in response to realistic design contexts.

Design and Technology is an inspiring, rigorous and practical subject which encourages students to express their creativity and analytical skills; preparing young people to live and work in an increasingly technological world.



Students in Design and technology will work with different materials using a range of tools and equipment to create their ideas in our well-equipped workshops and computer suites. Through the study of materials, processes, CAD/CAM, manufacturing systems and engineering in society students will think about how we interact with everyday things and how we can improve the quality of people's lives through better, more thoughtful and intelligent design. Students get to design and test ideas using 2D and 3D CAD software, then produce them using the 3D printer or laser cutter.



Food Technology allows students get hands on experience by following a recipe, cook and take home a finished product every practical lesson. They learn and develop the basic skills of successful food preparation, health and hygiene and healthy eating. All students study food technology at KS3, producing a range of dishes which they adapt and develop to suit different dietary needs. All ingredients for food at KEVI HGS are provided.



## Teaching of Design and Technology at KEVI HGS:

### KS3:

Four units of Design and Technology are covered each year, students change units every 9-10 weeks to study different areas that cover the Design and Technology curriculum.

YEAR 7	Timbers and the environment	Graphics and electronics	Food and nutrition	Textiles
YEAR 8	Let there be light	User centred design	Mechanical devices and aerodynamics	Food and nutrition
YEAR 9	Work of others	Food and nutrition	Bright ideas	FPT

### KS4

GCSE Design and Technology is an optional subject at KS4. The exam specification studied at KEVI HGS is by the AQA examination board that is assessed through NEA (coursework) (50%) and written exam (50%). The course comprises of the different DT material areas: timber, polymers, metals, electronics systems, textiles, papers and boards. Students study core technical principles, designing and making principles, including a broad range of design processes, environmental issues and technical principles.

### KS5

Product Design can be chosen as an option for A-level for students who have studied GCSE Design and Technology and achieved a minimum of a grade 6. The course is run in collaboration with King Edward VI Aston School and King Edward VI Handsworth Girls School. The exam specification studied at KEVI HGS is by the AQA examination board that is assessed through NEA (coursework) (50%) and written exam (50%).

The course develops the skills learnt at GCSE and allows students to gain a real understanding of what it means to be an engineer or designer. Students will be taught the necessary skills for researching, analysing, evaluating, ICT and problem solving. The course includes topics on sustainable energy, climate change, economic factors, historical, cultural and social issues.