

## Design Technology Department

### Facilities and Staffing

The Design and Technology department comprises of two well equipped and maintained workshops that cater for students working with a variety of materials: woods, metals, polymers and textiles. We have a small IT room of 10 computers. One of our workshops also has 4 PCs for student use and we also have bookable access to larger IT suites when accommodation for a whole class is needed. In addition to the general tools and equipment that could be expected in a department of this type, the workshops also contain a heat treatment area with a forge and welding equipment, a centre lathe, wood lathe, vertical mill, a Denford laser cutter, a Denford CNC vertical mill with spindle attachment and two 3D printers. There is also a spacious, fully equipped Food Room, with a range of both basic and more specialist equipment including an industrial grade blast chiller and dishwasher.

The Department currently has two full time and one part-time teachers who are required to teach all materials areas at KS4 and where possible teach within their specialisms at KS4 and 5. We also have 30 hours of Technician support from two trained technicians, one specifically working in the food area and the other who works across all areas but predominantly in the Design and Technology workshops.

### Curriculum

Our curriculum is intended to inspire and develop knowledgeable, creative, confident, safe and independent learners. We follow National Curriculum guidelines at KS3, our curriculum is dynamic and all of our schemes of work are fully accessible and well resourced.

#### KS3

Students are timetabled to be in department for 1 hour a week across the whole year. Mixed ability groups are taught by the same teacher for the whole year and students spend a term working with wood, metal, plastic or electronics, a term working with textiles and a term working in the Food area preparing a range of different dishes. With the exception of Food the subject content is delivered through a project. Roughly 50% of all the lessons across KS3 will involve practical work. The aim of the curriculum is to develop skills and knowledge using a variety of materials, tools and equipment in a stimulating and interesting way in order to prepare the students for study at GCSE and provide them with essential life skills.

#### KS4

We offer two GCSE courses. Students can opt for AQA Design and Technology (with some students wishing to focus on Textile's materials and processes). The students in Design and Technology are taught grouped together regardless of material preference. Students can also choose AQA Food Preparation and Nutrition. Group sizes for both GCSE courses are generally between 16-20 students with a maximum of 24.

#### KS5

We currently offer OCR GCE Design and Technology: Product Design. Our groups sizes are small and for the past few years we have successfully taught Y12 and 13 together.