

### 1. Introduction:

Our Design and Technology (D&T) curriculum, develops students design and making skills; combining traditional and modern manufacturing techniques exploring a variety of material areas such as product design, food, electronics and textiles. Students are challenged in ways which encourage them to work independently and collaboratively; designing, problem solving and creating.

The D&T is a forward thinking, innovative and creative department which offers many exciting creative opportunities to students. These include trips and visits from designers, opportunities to work creatively with professionals and design placements for our older students interested in this field.

In 2016 we secured a £39k grant from the Wolfson Foundation which allowed the school to purchase a wide range of new machines and equipment to further develop our Design and Technology teaching and learning.

During July 2017, we moved into our new purpose-built Academy. This enabled us to purchase more up to date equipment and facilities to enhance our Design and Technology provision. Our students have greatly benefitted from the improved Design and Technology provision during the last 3-4 years, which reflects in our students' high achievements in this area of the curriculum.

# 2 Staffing

The Design Technology Department consists of:

Head of Design Technology 1 teacher 1 technician

#### 3. Accommodation

This comprises:

Two workshops
A food technology room
A graphics/computer room

Equipment is a good mix of traditional and new technology. The department has developed a high level of computer-aided-manufacturing capability and there is a



small manufacturing area between the workshops, housing milling machines, a vinyl cutter, a 3D printer and a laser cutter. These machines are used by students in all year groups.

## 4. The Curriculum

#### **Key Stage 3:**

All students complete three Design and Technology projects each year which combine a range of material and subject areas (including food). They are able to develop and build on their existing Design and Technology skills and understanding within our creative and nurturing environment.

#### **Key Stage 4:**

At Key Stage 4, GCSE D&T is offered and is a very popular subject within the school. Our students are fully supported to use creativity and imagination to design and make their own prototypes that solve real and relevant problems; in addition to learning how to take design risks, helping them to become resourceful, innovative and enterprising citizens.

# The Sixth Form (Key Stage 5):

The A Level course offers students opportunities to work in a wide range of materials using a variety of techniques, but with particular emphasis on CAD/CAM and manufacturing systems.

Students are encouraged to take every opportunity to integrate and apply their understanding and knowledge from previous years design and technology learning and from other subject areas.

