#### **BARTON MANOR SCHOOL - DESIGN AND TECHNOLOGY**

#### **Facilities**

The Department of Design and Technology is comprised of one workshops/teaching rooms for Design and Technology, a Textiles room and a Hospitality Room. In addition to these there is a technician's preparation room/storage area, for the workshops and a preparation room for Food and nutrition. The department also has an office for the use of the Department team, within the Design and Technology facilities.

All teaching areas have access to computers. Design and technology equipment includes a laser cutter, 3D printer, sublimation printing system. The Food and nutrition equipment include twelve electric ovens with a mixture of gas and electric hobs and a low-level practical area. We are well resourced with a range of equipment, including a sous vide. The department uses a range of software programmes in both Design and technology and Food and nutrition. The department is supported across both disciplines by a technician.

### **Key Stage 3**

KS3 (Y7 - 9) Design and Technology is delivered through three 60-minute lessons per fortnight, and homework is set in 2 of those lessons. We follow the Design and Technology national curriculum and the learning is supported by a wide range of practical activities, ICT, interactive and printed resources, ensuring that a variety of activities is offered to suit every type of learner. Work set is largely project based using problem solving design and making tasks.

There are two key assessment areas, consisting of Design and Technology and Food and Nutrition. Students are rewarded through the awarding of BMS points, in line with whole School policy at KS3.

## **Key Stage 4**

Design and Technology is optional at Key stage 4. Engineering Design and Hospitality and Catering are offered at GCSE. The time allocation for KS4 is four 60-minute lessons per fortnight.

Engineering design is a process used to identify market opportunities and solve problems which contribute to the development of new products and systems. You will understand how market requirements and opportunities inform client briefs and will use practical skills such as drawing, computer modelling and model making to communicate design ideas. You will apply practical skills to produce a prototype in the form of a model and test design ideas to inform further product development. Through reflection, learners evaluate the prototype, making a comparable outcome against specification points, and possible improvements to their prototype design.

The Hospitality and Catering course provides our students with the ability to plan, prepare and present food is an essential life skill as well as providing a possible career route. Our aim is to equip learners with theoretical knowledge about the industry as well as enabling them to develop practical skills in planning, preparing and cooking a variety of dishes. As a broader goal we aim to make pupils aware of the wider issues surrounding the hospitality and catering industry, with links to global issues such as ethics, sustainability, food provenance, farming protocols, animal welfare, food miles and the agricultural toll on the planet. All within the guidance of the course curriculum.

# **Key Stage 5**

A joint Sixth Form with Barton Court Grammar School is planned and suitable courses post-16 will be discussed and agreed with the DT Department nearer the time. AT BCGS Students study the Eduqas Design and Technology Design and technology course for A level. The time allocation is nine 60-minute lessons per fortnight. Written examination: 3 hours (A level) 50% of qualification. The examination includes a mix of short answer, structured and extended writing questions assessing learners' knowledge and understanding. Non-exam assessment: 80 hours (A level) 50% of qualification. A level students have freedom to investigate and use the process of iteration before deciding upon a final design brief.

## **Staffing**

In the early years of opening, staff will also be a member of the Barton court Grammar School (BCGS) Design technology Department led by the Trust Director of Design Technology to ensure consistency of standards and provide additional support. Staff at Barton Manor, if they wish, may have the opportunity to teach at BCGS and viceversa to help form a collaborative team. Leadership roles will naturally develop as the school grows in size and opportunities for further promotion will be readily available.