

DESIGN & TECHNOLOGY DEPARTMENT

Personnel:

There are 5 full time teachers supported by 1 full time and 1 part time technician:-

- Mrs A Bailey Head of Department (Temporary)
- Mrs L Burke
- Mrs G Golba
- Mrs G Morris Deputy Headteacher
- Mr S MacDuff (Full Time Technician)
- Miss J Hampson (Part Time Technician)

The Curriculum - KS3

A wide range of units of work are undertaken throughout KS3 to prepare students for success at KS4. The emphasis is upon creativity, skills and a meaningful learning experience where pupils have a respect for each other, the environment and the materials with which they work. Pupils work within a happy but disciplined environment where trust and safety are of paramount importance. Upon entry in Y7, pupils undertake a baseline assessment with one teacher who nurtures skills and knowledge in all areas of Design and Technology and Food Preparation and Nutrition. In Y8 pupils undertake projects across a range of material areas moving through 4 projects, each with a specialist teacher. In Y9 pupils are offered the opportunity to visit all areas of the Design and Technology curriculum as well as Food Preparation and Nutrition to prepare them for their option choices.

The Curriculum – KS4

The Design and Technology Department follows the AQA GCSE specifications in Design and Technology and Food Preparation & Nutrition. In addition to this, at KS4, pupils also have the opportunity to study Level 2 Technical Awards in Pearson Health & Social Care and OCR Children's Learning & Development. Progress and examination results are excellent. In 2019, 23.3% of pupils achieved grades 9-7 and 86.7% of pupils achieved grades 9-4 in GCSE Design and Technology. In GCSE Food Preparation and Nutrition 8.1% of pupils achieved grades 9-7 and 85.5% of pupils achieved grades 9-4. Attainment and progress is also high in both technical awards with Health and Social care results being 21.4% L2D*-D and 100% L2D*-L2P and Children's Learning and Development 25% L2D*-D and 100% L2D*-L2P.

The school follows a fortnightly timetable and each lesson is one hour long, with five lessons taking place each day. At KS3, pupils have 3 lessons of D&T per fortnight. At KS4 option numbers are very high with 5 lessons per fortnight for each option choice.

<u>Resources</u>

The team demonstrates a willingness to adopt new technologies and innovative approaches and also the capability to 'upskill' to meet the constant changes the subject demands. The faculty is well equipped with computers (class provision in 4 of the teaching areas) using the 'thin client' hardware. It has its own dimension 3D printing facility, 4 laser cutters, an A0 commercial printer, a laser image transfer system, a die sublimation printing system, vinyl cutter, 2 A3 heat presses a CNC lathe and multiple CNC routers. Further to this, Textiles Technology has a range of CNC embroidery equipment and sewing machinery and the Food Preparation area is equipped with fully operational kitchen facilities to cater for our students. All equipment is extensively used throughout KS3 and into KS4. CAD provision is through the use of 2D Design, Solidworks, Adobe Illustrator, Adobe Photoshop and Google SketchUp.

The Department makes extensive use of CAD and actively supports staff development in this area. Pupils from Primary Schools attend during Y6 and undertake lessons using CAD software. This is seen as a huge advantage prior to attending in Y7. The subject also supports the very successful school Young Enterprise group that designs, makes and sells products outside of school.