

**At Key Stage 3 students will study the following aspects of Design and Technology:**

- Electronics
- Traditional hand and machine skills
- Computer Aided Design

During each project there is a strong emphasis on traditional making, engineering and craft techniques which ensures students have a broad skills base to take into Key Stage 4. Learning in Key Stage 3 relates to the project being undertaken but links in with the GCSE syllabus. In all material areas students are encouraged to develop their problem solving skills. Time is taken to teach iterative design – the process of developing many ideas and identifying the most appropriate idea to take forward.

All students also are given access to leading edge technology, which allows students to build Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) into their work.

Students will follow the following programme of study:

**Year 7**

- Templates and jigs
- Forces and motion
- Basic electronics
- CD case pinball machine

**Year 8**

- Graphics – 'Mini me' pictogram
- Chocolate mould
- Pewter jewellery

**Year 9**

- Systems and control – amplifier circuit
- Concrete casting
- Structures

