

## Design and Technology Curriculum Overview Rationale

### **Foundation phase**

The foundation phase of year 7, 8 and 9 is organised through a rotation of all five disciplines of Food, Electronics, Multi materials, Design and Textiles. Students will rotate around to a new discipline every 7 weeks. The aim of this rotation is enable the students to gain a clear understanding of each topic area and build a range of skills that will enable them to continue onto any of the KS4 options if chosen at year 10. All projects at ks3 will allow the students to further develop the skills learnt the previous year.

### **KS4 pathway phase**

At KS4 the students can choose one or a combination of the following options,

#### **GCSE DT Multi materials (Timbers)**

The option involves designing and making a product for a given user. The coursework topic is set by the exam board and the students must design and develop a prototype for a specific user. The main emphasis of the coursework is design and development of a product to meet a specific need. The coursework is worth 50% of the final grade the other 50% is gained by completing an externally set written exam.

#### **GCSE DT Systems (electronics)**

The option involves designing and making an electronic product for a given user. The coursework topic is set by the exam board and the students must design and develop a prototype for a specific user. The students must be confident with maths and science to support the theory side of this qualification. The main emphasis of the coursework is the design and development of an electronic product to meet a specific need. The coursework is worth 50% of the final grade the other 50% is gained by completing an externally set written exam.

#### **GCSE ART 3D design**

Although this is an Art qualification the outcome of this project will be in a 3D format and can incorporate textiles, design, and product design. The students will complete a design portfolio of observational drawings, Computer aided design work, material and manufacture techniques all recorded within their sketchbook. They will then complete a final design portfolio to enable them to make a final 3D piece worth 60% of their final grade. The students will then be set an external set exam question and again produce a portfolio of investigation and design with a final 3D practical piece.

#### **Vcert Hospitality and catering**

Hospitality and catering consists of a written exam component and a controlled assessment practical based element. The practical elements are practiced and developed throughout the two year course. Students are taught a range of skills that they then demonstrate by planning and cooking meals of their own design, often with specific dietary requirements. Alongside the practical development, the students will explore theory that will underpin their work within the kitchen and allow them to gain an understanding of the hospitality industry. They are tested on their theory knowledge within a written exam.