**Design and Technology Department.**

The design and technology curriculum provides a high quality and unique learning experience for students at St Joseph’s College. The curriculum stimulates students’ curiosity and provides them with the essential skills and knowledge needed to live and work in a technologically advanced world. Strong links with industry ensure that students develop good understanding of the work of product designers, engineers, architects and chefs.

**Key stage 3 Course details.**

During KS3 students follow the curriculum on a carrousel developing their skills in the areas of food, textiles and product design. Students work from detailed workbooks in their studies which contain class work, home learning as well as extension tasks for students.

**Year 7**, students undertake design and make activities which focus on the themes of magic pen holders in product design, scrappy snakes in textiles and healthy options in food. Students study each subject area for a 12 week block and then rotate.

**Year 8**, students undertake design and make activities which focus on the themes of CAD-CAM clocks in product design, humbug bags in textiles and healthy options in food. Students study each subject area for a 12 week block and then rotate.

**Year 9**, students undertake design and make activities which focus on the themes of moving toys in product design, fashion in textiles and foods from around the world in food. Students study each subject area for a 10 week block and then rotate. In the summer term students can opt to study one or more of the subject areas and then begin their GCSE studies in June.

**Key stage 4 Course details.**

In year 10 students can opt to study one or more of the specialist subject areas offered by the design and technology department. All subject areas follow AQA GCSE specifications and students study two components, unit 1 and unit 2.

Food Preparation and Nutrition helps students develop their knowledge and understanding of food and nutrition issues in a diverse society and enables them to work in a variety of contexts. This two-unit specification gives students relevant skills and knowledge which are transferable to other settings, enhancing career opportunities and providing a satisfying course of study for candidates of various ages and from diverse backgrounds

Textiles Technology - Textiles Technology enables students to develop a working knowledge of a wide range of textiles materials and components appropriate to modelling, prototyping and manufacturing. Students will learn about design and market influences, processes and manufacture, environmental issues and the use of ICT in relation to the manufacturing of material products.

Product Design - Product Design encourages students to design and make products with creativity and originality, using a range of materials such as paper and card, plastics, textiles, ceramics, food, electronics, timber based materials, and ferrous and non-ferrous metals. Candidates will also develop a variety of techniques for working with these materials.

**Assessment overview.**

Unit 1, examination accounting for 40% of total marks - Materials and components, design and market influences and processes and manufacture.

Unit 2 – Controlled assessment section accounting for 60% of total marks, Investigating the Design Context, Development of Design Proposals, Making, Testing and Evaluation & Communication

**Key stage 5 Course details.**

In year 12 students can opt to study one or more of the specialist subject areas offered by the design and technology department. All subject areas follow AQA A level specifications and students study two components, unit 1 and unit 2 in year 12 and a further two components, unit 3 and unit 4 in year 13.

Food Technology - Food Technology allows students to demonstrate their creativity when making food products as well as to gain an understanding of food science and nutrition.

Product Design - Product Design encourages students to design and make products with creativity and originality, using a range of materials such as paper and card, plastics, textiles, ceramics, food, electronics, timber based materials, and ferrous and non-ferrous metals. Candidates will also develop a variety of techniques for working with these materials.

Textiles Technology - Textiles Technology enables students to develop a working knowledge of a wide range of textiles materials and components appropriate to modelling, prototyping and manufacturing. Students will learn about design and market influences, processes and manufacture, environmental issues and the use of ICT in relation to the manufacturing of material products.

**Assessment overview for all subject areas:**

**Unit 1 - Materials, Components and Application**

50% of AS, 25% of A Level

2 hour written paper

80 marks

Based primarily on Materials and Components and consisting of three sections

Section 1 contains compulsory limited response questions

Section 2 offers a choice of one question from two

Section 3 contains one compulsory question

**Unit 2 - Learning Through Designing and Making**

 50% of AS, 25% of A Level

Coursework - approx 50 hours

80 marks

Written (or electronic) design portfolio

Manufactured outcome(s)

Coursework may take a number of forms: a simple design-and-make project, two smaller projects or a portfolio of work

**Unit 3 - Design and Manufacture**

25% of A Level

2 hour written paper

84 marks

Based primarily on Design and Manufacture and consisting of two sections

Candidates answer three questions: one question from three in each section, plus a final question from either section. Includes synoptic assessment

**Unit 4 - Design and Making Practice**

25% of A Level

Coursework - approx 60 hours

85 marks

Written (or electronic) design folder

Manufactured outcome

Candidates submit evidence of a simple, substantial designing and making activity

**AS + A2 = A-level**

**Further information available at** [**www.aqa.org.uk**](http://www.aqa.org.uk)

**How can I help my child progress in D&T and reach their full potential?**

In terms of helping your child to progress in their work, the library has access to the internet as well as books, students are encouraged to use the facilities on offer.

The Virtual Learning Environment (VLE) is currently under development and will have extensive resources and links on the D&T department pages.

Work books in KS3 contain all the module information as well as home learning and progress descriptors.

Students are encouraged to stay after school, in order for them to complete homework or if they require any assistance with a particular piece of work and staff hold weekly coursework clinics.

If you do require any more information regarding your child‘s course, content or any aspect of the design and technology curriculum, then please contact your child‘s D&T teacher.

Simon Goodall. Subject leader for D&T.