



Subject Summaries
3rd Form Creative/Technical Options

ART AND DESIGN in 3rd Form and GCSE

In the third form pupils are given the opportunity to develop their own projects and ideas. They will produce a project on a given theme, such as 'Food and Drink' or 'Work, Rest and Play'. They will learn how to develop their ideas through experimenting and researching. The 3rd year syllabus mirrors the GCSE one in many ways. It assumes that pupils have an interest and aptitude for the subject and enjoy new challenges and problem solving.

GCSE Art has many strands and should not be seen as the preserve of simply drawing and painting.

Students will start the course in the Fourth Form with a structured series of projects, building on their own individual strengths and aptitudes. Students will work in four areas of study, ceramics, printmaking, painting and sculpture and they will be encouraged to diversify and experience working with different methods and materials.

The course demands individuality, creativity and original work.

Assessment in GCSE Art is divided into two parts:

1. Coursework (60% of the mark)
2. Externally set Assignment (40% of the mark). This takes the form of a 10 hour practical examination. The coursework unit will be made up of 1 project, made during the 4th & 5th years. The progress of this coursework is closely monitored by staff throughout this time, via interim assessment and deadlines. The theme for the externally set examination is set by the exam board and given to the students 10 working weeks before the exam day.

Related art history research is gathered during the course. Candidates will have to show knowledge of the history of art and artists, making links with both modern and classical art where appropriate. This is done in a formal way in sketch books and will represent 25% of the overall coursework mark. Students will also be expected to visit galleries in their own time.

DESIGN AND TECHNOLOGY ENGINEERING in 3rd Form and GCSE

The 3rd year Design Technology Engineering course offers you an exciting opportunity to progress from the work that you have experienced during the 2nd year. The projects that are completed in the 3rd year will essentially form the basic foundation for future GCSE work should you choose to continue studying the subject.

As a department we offer two different subjects at GCSE; IGCSE DT Product Design and IGCSE DT Systems & Control (Engineering) therefore a much varied range of project work is studied to help you decide which one, if any, is best for you. It will give you the experience and skills needed to develop ideas through combining designing and making skills, together with the knowledge and understanding to create high quality products.

During the 3rd year you will use a wide range of materials to design and make everyday products using timber, metal, plastics and non-resistive graphics materials in order to produce a series of 'complete projects' that may include advertising and/or packaging. Working out your ideas with some degree of precision, taking into account how products will be used, who will use them, how much they will cost and their appearance. An understanding of designing and making by investigating products and finding out the work of professional designers and manufacturing industry is part of the course. We have recently introduced a very exciting project to the 3rd year course, which is the F1 in Schools challenge, to design and make F1 cars and then race them down our own track. This is a great introduction to the competition, in preparation for any student who is planning to continue studying the subject at A Level.

We make much use of lasers and computers, including CAD-CAM software (computer aided design and manufacture), as an integral part of the designing and making process. Equally important is the knowledge of being a competent user of hand tools and equipment, including welding machines and timber processing machines. The DTE Centre is well equipped to enable a wide variety of work to take place to a very high standard.

In the first term of the IGCSE Product Design course you will broaden your experience by making mini-projects to enable you to confidently tackle the coursework project in the remaining terms. This coursework will make up 50% of your IGCSE marks and is assessed by your teacher before being moderated by the examination board. Good time management skills are desired and very high coursework marks are achievable if you are prepared to put in the time required to produce good quality work. You will also need to make use of ICT to present your work and design using computer-aided design (CAD) during your coursework as all coursework folders are digitally produced. The remaining marks come from examinations at the end of the course. Here you will need to show knowledge of processes, materials and manufacturing techniques.

The IGCSE S&C Engineering course is intended as an introduction to appreciate and recognise the broad range of disciplines within Engineering. It allows students to develop skills and understanding which will be of use generally and as part of a progressive career path. The specification allows students to gain experience of the use of computers in a variety of engineering contexts, covering the important areas of problem solving, computer aided designing and control. This reflects twenty-first century engineering practice, thus enabling students to progress to more advanced study of engineering with confidence if they so wish. The coursework consists of a single task which accounts for 50% of the examination. The remaining marks come from examinations at the end of the course. Project tasks will make full use of the Departments extensive facilities including CAM, CNC milling, 3D printing, Control and CAD facilities.

These courses lead to a common course at Advanced level. This AQA examination, '3D Product Design' is suited to pupils from both courses and it will enable you to develop your DTE skills still further. Beyond this, there are a wide range of career opportunities including the Commercial Advertising and Graphic Design, Engineering, Architecture, Industrial Design, Teaching, Automotive Design, Manufacturing, the Construction Industry, Marketing and Management to name but a few. Whatever area you choose as a career, the problem solving design skills and the use of technology will be valuable attributes which employers increasingly look for.

Design is an everyday occurrence for all of us and together with the Technology which is an important and vital part of our lives. Design Technology Engineering could be a first stepping stone for you to make a difference in the future.

FOOD & NUTRITION in 3rd Form and GCSE

In the 3rd Form you will have 2 lessons a week, one of which is always practical. The aim is to provide interesting and fun lessons with a focus on practical cooking skills to ensure you develop an understanding of the nutrition, food provenance and working characteristic of a variety of food ingredients. The ultimate aim is for you to have confidence in the kitchen along with the knowledge to help you make healthy choices for the future.

The course is based on a different food commodity each week or two. We start with fruit where you will make fruity flapjack one week and Autumnal fruity muffins the next. Other commodities we cover are vegetables, rice, pasta, meat, fish and dairy. Not forgetting the favourite commodity of chocolate where we have a Speaker from Hotel Chocolat come in talk about how chocolate is made and allowing you to taste different chocolate types.

Tasting sessions are during the theory-based lessons to allow you to assess and compare products. We try to provide interesting and relevant recipes that you and your family will enjoy eating. These include festive dishes at Christmas and chocolate ones at Easter.

After completing the 3rd Form course, you will have learnt a large number of life skills, along with forming a great base prior to the GCSE Food Preparation and Nutrition course, should you choose to continue studying the subject. If you desire to go into the food industry, the largest manufacturing sector in the country employing 4 million people, this is the course for you. Or if you want to be a future Bake Off Contestant or even the next Jamie Oliver!

At GCSE will offer OCR Food Preparation and Nutrition. This course has a stimulating syllabus that covers the following areas:

- Nutrition
- Food provenance and food choice
- Cooking and food preparation
- Skills requirements: preparation and cooking techniques

The assessment is:

50% exam, 90mins duration.

15% food investigational task. 10 hours of work.

35% food preparation task. 20 hours of work, including a 3 hour practical.

We look forward to seeing you!