Information Technology

In today's world, where IT is constantly changing, individuals will increasingly need technological and information literacy skills that include the ability to gather, process and manipulate data. These skills are now as essential as the traditional skills of numeracy and literacy.

The impact of IT on society is enormous and as the percentage of businesses and households connected to communication networks such as the internet grows, so does the need for individuals who can master and manipulate these new technologies. As well as the rapid development of new technologies that gather, organise and share information, familiar technologies like television, telephone and computers are evolving and being expanded by digitised information, causing a convergence of technologies.

AS Level ICT encourages students to become discerning users of IT. It allows them to develop a broad range of IT skills, knowledge and understanding. This could form a basis for progression into further learning and/or employment.

Aims

The aims of this course are to encourage candidates to develop:

- ✓ the capacity to think creatively, innovatively, analytically, logically and critically;
- ✓ the skills to work collaboratively;
- ✓ the ability to apply skills, knowledge and understanding of ICT in a range of contexts to solve problems;
- ✓ an understanding of the consequences of using ICT on individuals, organisations and society and of social, legal, ethical and other considerations on the use of ICT;
- ✓ an awareness of emerging technologies and an appreciation of the potential impact these may have on individuals, organisations and society.

Prior Learning

The course develops the aims of the GCSE in ICT by enhancing and broadening the range and the understanding of the capabilities of applications and information systems studied. The use of a range of tools and techniques is required to solve more extensive and more complex problems. Thus a good pass in GCSE ICT is essential.

Theory Units

These count for 60% of the final mark and are assessed by a single two hour exam.

- Data, information, knowledge and processing
- Software and hardware components of an information system
- Characteristics of standard applications software and application areas
- Spreadsheet concepts
- Relational database concepts
- Applications software used for presentation and communication of data
- The role and impact of ICT – legal, moral and social issues

Structured ICT Tasks

This unit is designed to develop practical aspects of the subject. The tasks are intended to be structured in nature, covering practical aspects of ICT that cannot easily be tested in an examination environment. They count for 40% of the final mark.

The following skills are developed:

- Design
- Software development
- Testing
- Documentation

Tasks may involve:

- the design of part of a system;
- the production of a testing strategy;
- the use of software for development;
- the production of user documentation to show the user how to use the system;
- the production of technical documentation to show how the system was developed.

Exam board: OCR