

A-LEVEL INFORMATION & COMMUNICATION TECHNOLOGY (ICT)

In today's world, where ICT 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 ICT 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.

GCE A-Level ICT encourages students to become discerning users of ICT. It allows them to develop a broad range of ICT skills, knowledge and understanding. This could form a basis for progression into further learning, including progression from AS to A2, and/or employment.

If you enjoy computer software designing, and solving problems, then this is the course for you.

During this course you will:

- learn about the administration and management of ICT systems
- visit various businesses
- gain a large amount of technical background knowledge to support your study of ICT systems
- develop your problem solving skills and examine ICT systems not only from an academic, but also from an ethical, legal and sociological point of view
- put theory into practice to produce projects for your coursework units, worth 40% of the total course marks

ASSESSMENT

Assessment is by examination and coursework.

ENTRY REQUIREMENTS

GCSE ICT is a good foundation for this course. However, you may study ICT without having a GCSE qualification in ICT. The most important factor is that you have an interest in, and are enthusiastic about ICT.

LINKS WITH OTHER SUBJECTS

The skills you learn can be very useful in all subjects.

HIGHER EDUCATION AND CAREER OPPORTUNITIES

This course paves the way for careers in professional ICT management, both of systems and of people. All medium to large organisations use ICT and are ever more dependent on it. ICT is changing the way we work. How and where we work is evolving as technology impacts on the workplace. There is a great demand for people who have ICT skills at all levels. Career opportunities are excellent and well paid.

COURSE CONTENT

The AS units are:

Unit 1: Information, Systems And Applications

- 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

Unit 2: Structured ICT Tasks

- Design, Software development, Testing,
- Documentation

The A2 units are:

Unit 3: ICT Systems, Applications And Implications

- The systems cycle
- Designing computer-based information systems
- Networks and communications
- Applications of ICT
- Implementing computer-based information systems
- Implications of ICT

Unit 4: ICT Project

- Definition, investigation and analysis
- Design
- Software development, testing and installation
- Documentation evaluation.