

Information & Communications Technology

The world is increasingly dominated by the use of Information and Communications Technology. Many aspects of our daily lives rely on ICT on a practical level. This course will introduce you to the fundamentals of ICT, providing a foundation from which to extend your knowledge of this growing area. Through the course you will develop your understanding of the principles of problem solving using ICT. You will learn about the range of ICT applications and the effects of their use. The course aims for you to be able to apply this knowledge and understanding when developing ICT solutions to problems.

Before you start this course

It would be helpful if you have studied either Computing or Information Technology, although prior knowledge is not essential. It is probable that you will have demonstrated suitable GCE potential by achieving some success at GCSE or equivalent qualification level.

A qualification in ICT combines well with many subjects, including those that would benefit from an ability to obtain, manipulate, present and communicate information. It also goes well with subjects that contain analytical, scientific and technological aspects.

With a qualification in ICT you could go on to Higher Education or work in one of the many vocational areas emerging to reflect the importance of information technology in the modern world.

- To get a certificate for Advanced Subsidiary GCE, you will need to have studied for and been assessed on your performance in 3 AS units.
- To get a certificate for Advanced GCE, you will need to have studied for and been assessed on your performance in 3 AS units, together with 3 A2 units.

- Student Guide for Advanced Subsidiary/Advanced GCE Specifications

The Assessment Units for AS are:

Unit 2512 Information, Systems and Communications

Preparation for this unit will provide the foundation for all subsequent units. You will gain an understanding of the core aspects of ICT systems, which is developed and enhanced in subsequent modules.

Unit 2513 Structured Practical ICT Tasks

Preparation for Unit 2513 provides you with opportunities to apply skills, knowledge and understanding developed for Units 2512 and 2514 in a practical way. The structured tasks examine the skills of design, testing, implementation and documentation; they will prepare you for the requirements of the ICT Project, in the second half of the Advanced GCE, which will require the integration of these elements in response to an identified need. Tasks will require the use of an Information and Communications Technology system in their solution, based on the use of an appropriate applications package.

Unit 2514 Practical Applications of ICT using Standard/Generic Applications Packages

Preparation for Unit 2514 provides you with opportunities to acquire and apply skills, knowledge and understanding of the way standard software applications packages are used in different contexts.

The Assessment Units in A2 are:

Unit 2515 Communications Technology and its Application

Preparation for this unit extends knowledge and understanding of concepts related to ICT systems. Some concepts previously assessed in Units 2512 and 2514 are developed in greater depth, while some new concepts are assessed. Communication between computers and interaction between humans and computers and the converging technologies of IT and data communications are covered.

Unit 2516 ICT Project

Unit 2516 requires you to identify a well-defined problem, involving a third party user, and to generate a solution using ICT. As for Unit 2513, this is carried out using your choice of an appropriate applications package or other software.

Unit 2517 ICT Systems and Systems Management

Preparation for Unit 2517 extends the work covered for previous units by studying information in the organisation, management of change, advance database systems and project management.

These 3 A2 units complete the Advanced GCE qualification.

The assessment structure for ICT is:

