ICT

IGCSE Information and
Communication Technology

Subject: ICT

Course Title: IGCSE Information and Communication Technology

Why study this subject: IGCSE ICT is an exciting course that seeks to reward practical skills and develop students' understanding of ICT issues. There is a strong emphasis on practical skills allowing students to achieve a competent level in ICT, allowing opportunities for further study and good job prospects.

Aims of this subject: The aims are to enable students to develop:

● an understanding of the basic components, use and application of different ICT systems and networks
● the skills to analyse, design, implement, test and evaluate ICT systems
● the skills to understand the impact of current and new technologies on methods of working in the outside world
● the ability to recognize potential risks when using ICT, and use safe, secure and responsible practice

Assessment at a glance:

PAPER 1 Theory - Written paper testing sections 1–21of the subject content
All questions compulsory
Weighting 40%
Marks - 80   Duration 1 hour and 30 minutes

PAPER 2 - **Practical test assessing knowledge**, skills and understanding of sections 11–19 of the subject content
Document production, Databases and Presentations,
All tasks are compulsory
Weighting 30%
Marks - 70   Duration 2 hours and 15 minutes

PAPER 3 – **Practical test assessing knowledge**, skills and understanding of sections 20 and 21 of the curriculum content
Spreadsheets and Website Authoring
Weighting 30%
Marks - 70   Duration 2 hours and 15 minutes

Curriculum content:

Theory Content		
Unit 1	**Types and components of computer systems**	Different types of hardware, software, and operating systems; their uses, advantages and disadvantages. Components of a computer system such as RAM/ROM. Developments in ICT.
Unit 2	**Input and output devices**	Identification of input and output devices. Their uses, advantages and disadvantages.
Unit 3	**Storage devices and media**	Describe common backing storage media, uses of this media and different types of access.
Unit 4	**Computer networks**	Types of network, what they are made up of, advantages/disadvantages and how they work.
Unit 5	**The effects of using ICT**	Assessment of how ICT has affected areas such security, employment, home entertainment, communication, health and safety in the workplace and home.
Unit 6	**ICT Applications**	Look at how ICT is used in areas such as communication, data handling, control and modeling.
Unit 7	**Systems analysis and design**	Learn and apply the different steps of the System Life Cycle to scenarios, creating your own expert system.
Unit 8	**Safety and security**	Learn about physical safety, e-safety and security of data.
Unit 9	**Audience**	Audience appreciation, legal, moral, ethical and cultural appreciation.
Unit 10	**Communication**	Learn how to use communication technologies effectively such as e-mail and the internet.
Practical Content		
Unit 11	**File management**	Learn about manage files effectively and reduce file size for storage or transmission
Unit 12	**Images**	Learn how to work with images and use them effectively.
Unit 13	**Layout**	Learning to create and edit documents, work with headers and footers, margins, use of tables etc.
Unit 14	**Styles**	Learn to create, edit and apply different styles effectively and develop understanding of the reasons to use them.
Unit 15	**Proofing**	Learn to use the tools and techniques to verify the information.
Unit 16	**Graphs and charts**	Become skilled at creating spreadsheet models and create graphs and charts to analyse the data.
Unit 17	**Document Production**	Discover what makes professional documentation and learn how to use the tools in various publication packages to make vibrant and effective documents.
Unit 18	**Databases**	Learn how to store, filter, query, report and display data efficiently.

Unit 19	**Presentations**	Learn how to create professional, exciting and interactive presentations which deliver information effectively.
Unit 20	**Spreadsheets**	Learn how to create a data model, manipulate data on a spreadsheet, use formula, functions, cell referencing etc.
Unit 21	**Website Authoring**	Using HTML coding and GUI interfaces in order to create and edit web pages.

Additional Information:

There is no coursework to submit – pupils will study both theory and practical skills in years 10 and 11 with an option to sit exams at the end of Year 10 or Christmas in Yr11 before the final dates for exam in May/June.

Future Employment Prospects:

A sound understanding of basic concepts for business applications like word processing, presentations, spreadsheets and databases, along with an appreciation of online technologies will set a student up for life, as he/she will be able to grow and adapt his/her skills as technology changes. No area of life remains untouched by ICT and studying IGCSE ICT will help complement the skills that the students acquire as part of their everyday life.

You may choose to study ICT further at university, or you may use the skills you have learned to support your study of other subjects. If you decide to enter the world of work, the skills learned will support you in almost every job you can think of!

Jobs/Careers directly related to ICT
- Database Administrator
- Multimedia Programmer
- Software Engineer
- Systems Designer
- Web Designer
- Computer Games Developer
- Network Engineer
- Technology Archivist
- Media Researcher

Examples of degrees directly related to ICT
- Computer Networking
- Computer Science
- Web Design
- Web Technologies
- Technologies for Digital Media
- Software Engineering
- Computer Engineering
- Multimedia Technology
- Audio Technology