

## ICT

### Key Stage 3

#### **Year 7**

##### Topics

Presenting Information - *Pupils look at how to format information for specific audiences and how to incorporate data from different sources into a good quality presentation.*

Finding Information – *Pupils look at the different sources of information, the reliability and quality of information and way of improving their efficiency in finding information.*

Modelling Using Spreadsheets - *Pupils look at using spreadsheets to model different situations and use these models to make predictions.*

Control with Scratch – *Pupils look at how devices are controlled using computers and make their own interactive project using a simple computer program.*

Handling Information Using Databases – *Pupils look at how databases can be used to store, find and present data.*

Website Design – *Pupils evaluate the suitability of websites before designing and creating a website using industry-standard website design software.*

Photo Editing – *There will be a brief introduction to photo editing and graphics handling.*

Web Safety – *this will focus on the email/instant messaging safety and the need to keep personal data private.*

A visit to the Land Rover plant pupils extend their knowledge of control and how it is applied in the ‘real world’.

#### **Year 8**

##### Topics

Hardware and Software

The Systems Development Life Cycle

Fashion multimedia website group project

Animation using Flash

Computer Game making individual project

Handling Data Project

Web Safety – this will focus on the risks associated with internet use, and how to respond to these risks.

Introduction to GCSE Coursework

#### **Year 9**

##### Topics

Coursework: Creating a Pay Slip System for a Travel Agent (60%)

Exam Key Skills (Multiple Choice - 40%) for the GCSE short course examination taken this year, based on knowledge of typical ‘office’ applications.

#### **Support for Pupils:**

Year 7

Pupils are able to email their teacher for support outside of lessons.

Year 8

Pupils are able to email their teacher for support outside of lessons.

Year 9

Sessions are held after school on Monday nights for those who need extra help with their coursework

Pupils are able to email their teacher for support outside of lessons.

Checklists and coursework guidance sheets are provided at the start of each section. Each pupil should also have a coursework mark sheet which will contain a record of their current marks and advice on how to improve their marks further.

Pupils will be given practice tests they can complete online at home or school to prepare them for the main exam.

#### **Useful Websites:**

Year 7

<http://www.teach-ict.com/ks3home.htm>

<http://www.reviseict.co.uk/ks3/index.shtml>

Year 8

<http://www.reviseict.co.uk/websites/index.shtml>

<http://www.reviseict.co.uk/dreamweaver/index.shtml>

<http://www.teach-ict.com>

Year 9

[http://www.keyskills4u.com/tests/2004/LSDA\\_engine.swf](http://www.keyskills4u.com/tests/2004/LSDA_engine.swf) (Practice tests - you should try the ICT Level 2 tests)

<http://www.keyskills4u.net/login.html> (A training guide for the exam - again choose ICT level 2)

<http://www.teach-ict.com>

## Key Stage 4

### Year 9 & 10

#### Content

Coursework: Creating a website for a travel agent (60% of year / 30% of full course)

Exam (40% of year / 20% of full course)

#### **Support for Pupils:**

Sessions are held after school on Monday nights for those who need extra help with their coursework

Pupils are able to email their teacher for support outside of lessons.

Checklists and coursework guidance sheets are provided at the start of each project. Each pupil should also have a coursework mark sheet which will contain a record of their current marks and personalised advice on how to improve their marks further.

#### **Useful Websites:**

##### Websites

<http://www.ictgcse.com/>

<http://www.teach-ict.com>

<http://www.bbc.co.uk/schools/gcsebitesize/ict/>

<http://www.reviseict.co.uk/revision/index.shtml>

## Key Stage 4 – Computing

### AS Computing - Year 10

#### Topics

Data

Networking

Computer Hardware and Architecture

Software Types

Fundamental Programming Concepts

#### **Support for Pupils:**

Pupils are given weekly programming tasks and help sheets. The homework for these can be completed at home (using software which is free to download) or on the school machines at lunchtimes, or T3 after school.

Pupils are able to email their teacher for support outside of lessons.

#### **Useful Websites:**

<http://www.horsforth.leeds.sch.uk/subjects/comp/alevel/default.asp>

<http://www.simonchester.com/computing/>

<http://ocrcomputing.org.uk/>

<http://msdn.microsoft.com/vstudio/express/beginner/kids/csharp/> (Microsoft's guide to C#)

<http://www.c-sharpcorner.com/>

<http://www.gr82bageek.com/>

<http://www.csharphelp.com/>

## **Key Stage 5**

### **AS/A2 ICT**

#### **Year 12**

##### Topics

##### UNIT G061 Information, Systems and Communications (Summer 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

##### UNIT G062 Structured Practical ICT Tasks (Coursework)

- Design
- Software development
- Testing
- Documentation

This is tested through a set of tasks involving the use of common applications software (e.g. spreadsheets, databases etc.). These are quite complex and require both thought and good software skills.

### **Year 13 (only for students already in Y13 in 08-09) – This is the final year of the ‘old’ specification**

##### Topics

##### UNIT 2515 Communications Technology and its Application (January Exam)

- Features of Networked Systems and the Systems Cycle
- Communications and Networked Systems
- The Role and Implications of Communication Systems
- Applications of ICT

##### UNIT 2516 ICT Project

Students have to create and document an ICT system to solve a real company or organisation’s problem.

##### UNIT 2517 ICT Systems and Systems Management

- Information and the Organisation
- Designing Computer-based Information Systems
- Implementing Computer-based Information Systems
- Implications of ICT

## **Year 13 (2009 onwards)**

### UNIT G063 ICT Systems, Applications and Implications (Summer Exam)

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

### UNIT G064 ICT Project

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

Students have to create and document an ICT system to solve a real company or organisation's problem.

## **Support for Pupils:**

Year 12

### Extra Support

Regular email updates are offered to parents on their daughters' progress. If you wish to join this scheme please email [njf@kegschg.bham.sch.uk](mailto:njf@kegschg.bham.sch.uk).

Students are able to email their teacher for support outside of lessons.

Year 13

### Extra Support

Students are allocated a member of staff who will oversee their coursework and help them make progress through weekly discussions.

Regular email updates are offered to parents on their daughters' progress.

Students are able to email their teacher for support outside of lessons.

## **Useful Websites:**

**Year 12**

### Websites

<http://www.teach-ict.com/asa2home.htm>

<http://www.ocrict.org/> (Unofficial OCR Site)

<http://news.bbc.co.uk/1/hi/technology/default.stm> (pupils are expected to check here regularly to keep up to date with technological developments)

The following sites are designed for different syllabuses but still contain useful information

<http://www.fatmax.org/>

[http://www.thekjs.essex.sch.uk/yates/year\\_12.htm](http://www.thekjs.essex.sch.uk/yates/year_12.htm)

<http://www.ict-teacher.com/Alevel.html>

### **Year 13**

#### Websites

<http://www.teach-ict.com/asa2home.htm>

<http://www.ocrict.org/> (Unofficial OCR Site)

[http://www.antonine-education.co.uk/ict\\_a2.htm](http://www.antonine-education.co.uk/ict_a2.htm)

<http://news.bbc.co.uk/1/hi/technology/default.stm> (pupils are expected to check here regularly to keep up to date with technological developments)

#### General Resources Suitable for All Years

<http://www.openoffice.org/> (A free, downloadable office suite)

<http://www.bcs.org/> (The British Computer Society)