

ICT & COMPUTING – KS4

Teachers: Ross Fincham

The ICT department offers stimulating and engaging curriculum. All KS3 pupils are taught skills in communicating information, developing ideas (coding), evaluating information and finding information. Key stage 4 pupils continue to develop these core skills before enrolling on the BCS Essential Digital Skills Qualifications (EDSQ).

Schemes of work:

Year 10

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
<p>PRESENTING EVIDENCE</p> <ul style="list-style-type: none"> Use knowledge of the planning process to identify ways things are planned for things and why it is useful Use Word processing software and appropriate formatting to create documents that solve problems and present information logically Combine search result information with software to create new documents that convey information to a target audience Explore online document creation and how details are presented. Convey information clearly and use the knowledge of the software tools to generate a document Investigate how different DTP software programs can be used to create an outcome as expected by traditional use of the software. Using tools within software programs to generate a non-traditional document Explore how software can be used to complete tasks used in 'everyday', 'employment' tasks. Create documents such as C.V or Personal Information Edit a document by applying an item such as a letterhead 	<p>SPREADSHEETS</p> <ul style="list-style-type: none"> Recap of the location and features of spreadsheet software Explore the use of absolute cell references and how they are used with a spreadsheet Identify ways of copying formulas across different cells in order to make working with data more proficient Creation of spreadsheets to record and format data using text based formulas such as =len Extend the use of formulas across the spreadsheet and sheets by using different=lookup formulas apply more complex features to graphs and charts by using the format tools and other software programs Analyse results on a spreadsheet to answer questions that require a result Explore how spreadsheets can be used with data personal to an individual or business and manage the control of a set of criteria's extend formulas to control specific outcomes such as =IF to display specific information Apply conditional formatting to cells 	<p>DATABASES</p> <ul style="list-style-type: none"> Explore the variety of ways that data is presented and how it can be organised Identify what a flat file and relational database is and how they can be used Looking at online data and how data is used in a commercial/entertainment way Know that databases contain records which are broken down into fields Look at databases and identify ways to physically organise the data in a variety of ways Use software tools to sort data in ascending, descending and alphabetical orders Begin to explore using filter tools to place and specifically locate key sets of information Explore ways of presenting results from searches such as screen printing and annotating across different software programs. 	<p>CHECKING ACCURACY</p> <ul style="list-style-type: none"> Understand that most software programs have a help tool which can be used to locate answers to using the software Use logical questioning to narrow search results in a way that can be presented How a database containing multiple records can be reset in order to continue searching or apply a new search Use software to narrow results across different software programs and edit them using multiple software types Locating errors within data by using filtering and entering different menus then editing the results as needed. Explore how to open a document and apply changes but keep the original document Use software to create a data set and then convert it to a suitable file format by selecting a program Generate fields and entries by inputting data either using physical inputting or copy and paste options 	<p>Start of BCS Digital Skills qualifications</p> <p>USING DEVICES AND HANDLING INFORMATION</p> <p>Using Devices</p> <p>Know what is meant by hardware, software, operating systems and applications; locate and install an application; apply system settings, including those for accessibility.</p> <p>Finding and Evaluating Information</p> <p>Navigate online content using hyperlinks, menus and other navigation elements to locate required information; carry out searches to find information and content.</p>	<p>Managing and Storing Information</p> <p>Open, read and save information from/to a file using appropriate naming conventions; work with files and folders to store, organise and retrieve information using local and remote storage.</p> <p>Identifying and Solving Technical Problems</p> <p>Recognise when a technical problem has been encountered, solve simple technical problems, and seek assistance when unable to solve a technical problem.</p>

Year 11

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
<p>Creating and Editing Documents</p> <p>Use a suitable application to enter, edit and format information (including text, numbers and graphics).</p> <p>Creating and Editing Digital Media</p> <p>Capture and save images, sound and video</p> <p>Communicating and Sharing</p> <p>Create, edit and use contacts when sending and receiving online communications comprising text and other digital content to individual and multiple recipients; initiate and participate in a video call.</p>	<p>Managing Traceable Online Activities</p> <p>Identify the types of digital activities that leave a 'digital footprint' and understand the implications.</p> <p>TRANSACTIONING- Using Online Services</p> <p>Complete and submit a form as part of an online transaction, complying with verification checks.</p> <p>Buying Securely Online</p> <p>Buy an item/service online using a chosen method of online payment.</p>	<p>Protecting Privacy</p> <p>Identify situations where personal information may be stored by devices and online activity; identify and use simple methods to protect personal information and privacy.</p> <p>Protecting Data 1</p> <p>Be aware of online risks and threats; identify and use simple methods to protect a device and data from online risks and threats; be aware of the security risks of using public Wi-Fi.</p>	<p>Protecting Data 2</p> <p>Configure and use secure ways to access devices and online services.</p> <p>Being Responsible Online 1</p> <p>Know how to report concerns with online content.</p> <p>Digital Wellbeing</p> <p>Recognise and minimise the effects of physical stresses of being online.</p>		

Syllabus materials KS4:

[eds-qualification-specification-e3-work.pdf \(bcs.org\)](https://www.bcs.org/eds-qualification-specification-e3-work.pdf)

Careers in ICT/computing:

[1438 My Learning My Future Computer Science Final.pdf \(careersandenterprise.co.uk\)](https://www.careersandenterprise.co.uk/1438-My-Learning-My-Future-Computer-Science-Final.pdf)