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| Sir John Hunt CSC (@SirJohnHuntCSC) / Twitter | **Sir John Hunt Community Sports College – 6th Form - KS5 Computing**  |
| **BTEC Information Technology Summer Induction Task** |

## **Course Structure:**

This is a two-year course that is made up of four different units which are assessed by two exams and two pieces of coursework. The structure of your course is below:

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| **Year 12** | **Unit 1** – Information Technology Systems – Assessed by written paper exam |
| **Unit 3** – Business use of Technology and Social Media Platforms – Coursework Assignment |
| **Year 13** | **Unit 2** – Creating Database Systems to Manage Information – Assessed by computer-based exam |
| **Unit 6** – Website Development / Data Modelling – Coursework Assignment |

## **Frequently Asked Questions:**

These are a number of questions that are often asked by students before they start this course. If you have any questions that aren’t listed here, then please contact Mr Colwill at j.colwill@sjhcsc.co.uk.

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| **Q** | Is there any programming on this course, what programming languages do I need to know? |
| There are opportunities throughout this course to learn and practise multiple programming languages. Within units 2 and 6 you will learn and implement the following programming and scripting languages: SQL, HTML, CSS, JavaScript, Python, VB.net, and C#. You do not need prior programming experience, but this will help you.  |

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| **Q** | Do I need a computer at home and is there any special software I need? |
| You are not required to have a computer at home; however, it will be extremely useful for asking learning resources outside of school. You do not need specialist software however it is recommended you have Visual Studio Code, the latest version of Edge or Chrome web browser and the latest version of Microsoft Office 365. As a Sir John Hunt Student, you can download this for free using your student login from [Office.com](https://www.office.com/). |

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| **Q** | Is there a lot of homework, how should I revise for this course? |
| You will receive 1 hour of home learning each week plus a single period 0 task to complete each week. In addition to this a “super” curriculum will be available for you to advance your Computer Science knowledge even further. When you have your student account you will have access to the KS5 Computing Portal to access a wide range of revision and learning resources. |

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| **Q** | I am thinking of purchasing a computer or laptop over the summer what should I buy? |
| Because each individual has a unique need for a computer system it is recommended you speak to Mr Colwill for advice around purchasing computer hardware. You will have access to all the hardware and software you require for this course within our Computing labs. * Any modern computer capable of running Microsoft Access (a free downloadable copy of Microsoft Office is available to all students through the ICT Support office)
* Latest version of Google Chrome (best for using Google Classroom and GSuite productivity software for coursework documentation).
* Reliable high-speed broadband Internet access. 4G mobile data is not ideal as data allowances may be consumed very quickly.
* A mobile phone or tablet would be useful for completing some aspects of unit 3.
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| **Task 1 – Researching digital devices, their functions and use** |

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| Within Unit 1 – Component A1.1 in September we will look deeply into the different digital devices, what their functions are and the use of those devices for different groups of people. Your first task is to find examples of each of these devices and describe their functions and explain what they are used for.[Click here](https://www.youtube.com/watch?v=vqUsBtUHiiw&list=PLd8uNPGNmEMdDOCHf8UHgPg8daowV34sz&index=2) to access a helpful video for completing this table or scan the QR code. |  |

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| **Digital Device:** | **Function:**  | **Uses:** |
| Multifunctional Devices |  |  |
| Personal Computers |  |  |
| Mobile Devices |  |  |
| Servers |  |  |
| Entertainment Systems |  |  |
| Digital Cameras (Still / Video) |  |  |
| Navigation Systems |  |  |
| Data Capture and Collection Systems |  |  |
| Communication Devices and Systems |  |  |

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| **Task 2 – Investigating an IT system in Education** |

IT infrastructure within the business sector is constantly being updated and developed, however, within the education sector updates are more staggered. As a result, this makes planning and designing education IT systems a complex feat. For this task you are going to investigate a simplified education system that is used by schools and training organisations. You should sign into either Google Classroom, Sparx Maths, or Seneca and have attempt to answer the following questions to form your investigation.

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| What education system are you investigating? |  |
| Explain what the purpose of this system is and what it is used for. |  |
| Who is the main target audience for this system?  |  |
| What devices do users of this system need in order to use it. Are there any differences to the system on different devices? |  |
| Do you think this system is easy to use as a user? With examples justify your opinion. |  |
| What are the benefits of this system being available on different types of devices? |  |
| What do you notice about the graphical user interface of the system? What does it look like, what colours have been used. Why do you think it was designed like this? |  |
| Are there any negatives to or drawbacks to this IT system on specific or all devices?  |  |
| Thinking as a user of this system what some possible improvements that could be made. Use your imagination, this could be simple design changes or new functionality. |  |

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| **Task 3 – Investigating Social Media use by businesses** |

Social Media plays a fundamental role in the marketing and eventual success of a business. Large corporations now have entire departments or hire dedicated companies to manage their social media presence online. You should investigate how **three** different types of business leverage social media and whether it is effective. You will need to select a small local business in Plymouth, a UK national business, and an international business to investigate. For each business you should browse their social media channels for example Facebook, Twitter, and Instagram and make notes for the following questions.

* What is the name of the business and is it local, national, or international?
* What is their main purpose for using social media? Advertising products, promoting brand, answering customer questions.
* How do they use social media? Do they promote in a specific way or with a particular type or format of post? Provide examples.
* Which social media channels do they use? Are they all used for the same purpose or different? Why do you think they use specific social media channels? Do they have different or specific target audiences on different social media platforms?
* Do you think their social media presence is having a positive impact on their business image and online identity? How do you think their social media presence affects their customers and potential customers?
* Are there any suggestions or improvements you would make to their social media presence based on what you have seen other businesses do? Explain your suggestions and ideas.

You should create a short presentation identifying your three different businesses and briefly explaining their social media presence online using the questions above. You may want to include different screenshots of parts of their social media channels. Your presentation should be approximately 6 – 10 slides long.

**Personal Development Task**

**Preparing for Unit 3 coursework with an extra qualification**

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| If you would like to prepare for your Unit 3 coursework and earn an extra qualification to add to your CV, you may wish to sign up to the Future Learn website: <https://www.futurelearn.com/courses/create-a-social-media-marketing-campaign> for their 7 day Free trial and complete the “Create a social media marketing campaign” course. It is a 6-hour course that is 100% online. You can access this course by using the following link or scanning the QR code. |  |

**Revision and preparation videos**

**BTEC Level 3 Information Technology Revision Videos**

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| If you would like to prepare for your Unit 1 exam then you can go to the following YouTube playlist: <https://www.youtube.com/playlist?list=PLd8uNPGNmEMdDOCHf8UHgPg8daowV34sz> or scan the QR code to the right to access the playlist. This will give you an introduction to the entirety of the content in Unit 1.  |  |

Please contact Mr Colwill via email at: J.Colwill@sjhcsc.co.uk for further information or to answer any questions you may have about this course or this summer task.