

BTEC INFORMATION TECHNOLOGY

TRANSITION RESOURCES

EXAM BOARD: EDEXCEL

Qualification	<p>BTEC Level 3 National Extended Certificate in Information Technology</p> <p>Students who study ICT may go on to university to study the subject at degree level as the qualification carries UCAS points and is recognised by higher education providers and a great route for those wishing to progress to apprenticeships or employment. Due to the practical nature of the course you will develop key industry and practical employability skills such as good problem solving and logical thinking skills which can be applied to many different subject areas.</p> <p>Previous students have progressed onto higher education courses such as Computer Technology, Information Systems and Cyber security.</p>
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Exam board and link	<p>Pearsons</p> <p>https://qualifications.pearson.com/en/qualifications/btec-nationals/informationtechnology-2016.html</p>
Specification details	Pearson BTEC Level 3 National Extended Certificate in Information Technology
Course book	<p>Pearson BTEC National Information Technology student book (for the 2016 specification)</p> <p>Pearson BTEC National Information Technology Revision Guide</p>
Recommended online learning	<p>This is an online course that you have to sign up to. It is free but will give some use to Unit 3. If you complete the work below maybe try to work though this</p> <p>https://www.futurelearn.com/courses/create-a-social-media-marketing-campaign</p>
Recommended reading list	<p>Some potential website have been listed below that might help you.</p> <p>Information Technology Systems</p> <ul style="list-style-type: none"> • http://www.bbc.co.uk/news/technology - British Broadcasting Corporation – News and information regarding technology and IT • http://www.forbes.com/technology/ - Forbes.com LLC™- News and information regarding technology and IT <p>Social Media</p> <ul style="list-style-type: none"> • Social Media Examiner is one of many blog sites with lots of up-to-date articles about using social media for business purposes: www.socialmediaexaminer.com • Social Media Today also focuses on social media marketing for business: www.socialmediatoday.com • Mashable is blog site with a UK based version with lots of up-to-date articles on social media: mashable.com/social-media/ • Articles from the UK Guardian newspaper on a wide range of issues related to social media: www.theguardian.com/media/social-media <p>Above are some examples of websites. Further useful resources may be found at http://qualifications.pearson.com/en/support/published-resources.html#step1</p>

We recommend you use Cornell Notes to prepare for your new course. Please see these videos to help you develop the technique: <https://youtu.be/WtW9lyE04OQ>

Transition Tasks

<i>Unit 1 – Information Technology Systems</i>	<i>4</i>
<i>Unit 2 - Creating systems to manage information.....</i>	<i>7</i>
<i>Unit 3 - Using Social Media in Business.....</i>	<i>8</i>
<i>Unit 6 – Website Development</i>	<i>9</i>

Unit 1 – Information Technology Systems

Note: This unit of work will be assessed by a traditional examination and you should be able to apply all knowledge, discovered within the unit, within context.

Task 1 - What is an IT system?

*Using your research skills, discover what is meant by the term 'IT System' and produce a **one page** document showing evidence of your knowledge and understanding about IT systems and technical vocabulary. Please include a bibliography (webliography) detailing websites (www ref., page title, and dates) viewed.*

Task 2 - The features and uses of digital devices in IT systems to meet the needs of individuals and organisations.

There are a number of Digital devices that form part or all of IT systems. Below is a table of the key device. Your task is to explain the features and uses of each key device when making up an IT System. The first Digital Device has been done for you. Make sure you give examples where possible.

Digital Device	Function	Use
Multifunctional Devices	A Multifunctional Device, or MFD, is typically the printing device in most offices but is referred to as a printer or photocopier. These machines incorporate scanning, copying, and printing as a minimum, into a single device – some can also be used for emailing and faxing.	This would be used in many different forms of IT Systems. It could be found in a school, office or even home environment. This would offer the people using it a number of options in terms of what they use it for. This could be beneficial in a number of ways for each environment. For example using it in a school environment would allow people to copy or print resources that are needed. Another example would be allowing a person to set up a business from home or even a small office. It would allow them to become a lot more professional as they would have a number of options in terms of printing/scanning/scanning to usb.
Personal Computers		
Mobile Devices		
Servers		
Entertainment Systems		
Digital Cameras – still, video		
Navigation Systems		
Data Capture and Collection Systems		
Communication Devices and Systems.		

Task 3 - IT systems in Education

In education, IT Systems are continually being developed and updated. For this next task, you will conduct research into the IT Systems used by education and training organisations, and how they meet specific needs of students. What is the system they used for? What devices do they need and use? How and why do you know this? Can you give examples of where it is beneficial? Are there any drawbacks to the IT system? Remember not everything is perfect. Why is it a drawback/negative? Can you example with examples as to why.

Task 4 - Case Study

Search online for a business that uses an IT System and identify how the system meets particular needs.

Unit 2 - Creating systems to manage information

TASK 1: Make detailed notes about who uses databases and why? (approx. 2 pages)

You may want to use a text book to do this. You can purchase the book we use - Pearson BTEC National Information Technology student book (for the 2016 specification) and there is a revision guide Pearson BTEC National Information Technology Revision Guide.

*Alternatively you may use the internet to do your research. Use the key phrase **uses of database**.*

TASK 2: Identify the key elements of both a *Flat File* and *Relational Database* (approx. 2 pages), and complete the **key terms table below:**

Keyword	Definition
<i>Primary Key</i>	
<i>Secondary Key</i>	
<i>Data Redundancy</i>	
<i>Data Integrity</i>	
<i>Data Consistency</i>	
<i>Validation</i>	
<i>Verification</i>	

*Use the internet using the search keywords **flat file database** and **relational database**.*

Unit 3 - Using Social Media in Business

You may be familiar with social media for personal use and in this unit, you will discover how it can be used in a business context. You will explore how businesses use social media to promote their products and services. You will also practically develop skills to implement social media activities in a business scenario to meet a client brief working with local employers.

Task 1 - How do businesses use social media to advertise their business?

First of all, you need to understand what social media is and how it works. Create a definition of what social media is giving examples where possible. Think about what they are, features of them and how they are used.

Task 2 - What do business do to promote using social media?

- Discuss and explain(give examples to back up your points) how business use social media to promote. Try to back up every point you make when you are talking about how the business uses social media.

Task 3 - Chose three different types of business, small local, large national and perhaps an international business

- How do they use social media? Do they promote in a certain way? Paid? Unpaid? Give examples
- What strategies do the use? Promoted adverts?
- Which social media do they use? Why do they use a certain one? Target audience?
- Who uses Instagram, Twitter, Facebook etc.? explain why
- What are the demographics of the target audience? Does this influence what social media they use and how they use it?

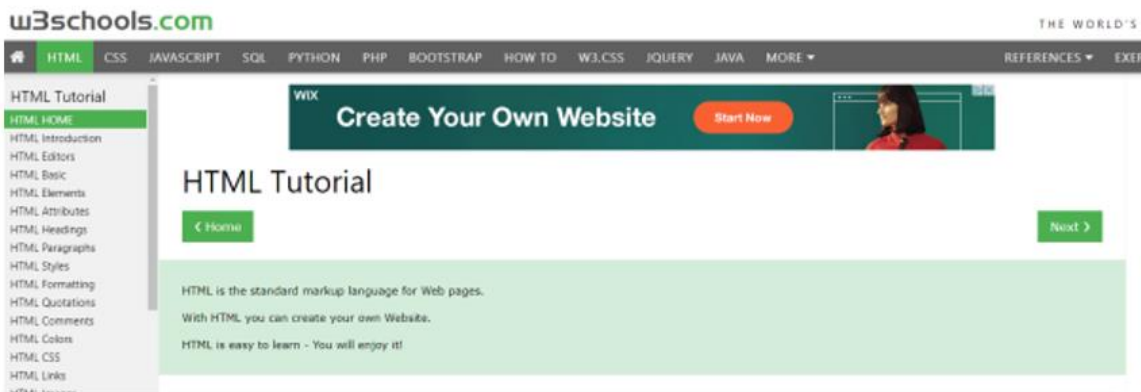
Create a presentation on how social media has changed the way companies advertise their products? Please make sure you use a least one company as an example in your presentation. (approx. 6 slides with notes)

Unit 6 – Website Development

Task 1 - Learn some HTML – Hypertext Markup Language

We use Serif WebPlus to produce a website in Year 13, which allows you to produce a website without code, however to add advanced features you will need to have an understand of what is happening under the hood. That's what it is a good idea to learn some HTML and CSS script.

Use the following website to help you get a head start.



<https://www.w3schools.com/html/>

It is great and can give you an insight into the world of HTML. You can use free software like Notepad or Notepad++ to write the code.

We don't create the websites in this but it will be helpful in understanding the code generated and used to write webpages

Task 2 - Learn some CSS – Cascading Style Sheets

Deepen your understanding by learning CSS, by completing this course

<https://www.w3schools.com/css/default.asp> on the website.

Task 3 – Learn some JavaScript

Take your learning of web languages one-step further and learn JavaScript in order to code dynamic webpages and interactive elements.

<https://www.w3schools.com/js/default.asp>