

JWS Bridging Project

BTEC Level 3 in

Information Technology



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BTEC Level 3 in Information Technology

Course overview

Introduction

This qualification gives learners the opportunity to develop their knowledge of and skills in information technology. They will develop a common course of information technology knowledge and study areas such as managing information data and using It for the communication and sharing of information

Unit 1 : Information Systems		Unit 2: Creating Systems to Manage Information	
	Learners consider the role of computer systems and the implications of their use in personal and professional situations		Learners study the design, creation, management, testing and evaluation of a relational database system to manage information
Unit 3: Using Social Media in Business		Unit 6: Website Development	
	Learners explore how businesses use social media to promote their products and services. They will implement social media activities to meet business requirements		Learners investigate website development principles. They will design and develop a website using scripting languages.

Coursebook: This is not compulsory to purchase but you may find it useful



TEC Nationals Information Technology Student Book + Activebook
 Publisher: Pearson
 Author: Jenny Phillips, Alan Jarvis, Mark Fishpool, Richard McGill, Tim Cook, David Atkinson-Beaumont
 ISBN: 9781292140414

How to use this booklet

Within this booklet, you will find access to a range of resources that might interest you.

The booklet includes:

- Learning tasks to be completed
- An optional free online course to support Unit 3
- An optional free online course to support Unit 2
- Sample of books, movies and TED Talks
- A baseline assessment

The tasks that are highlighted in purple should be submitted either by post to school for my attention or alternatively, you could photograph them and send them to my e-mail address at l.barton@jws.bham.sch.uk or bring them along when your 6th form journey begins

Deadline for this baseline assessment is **28th June** as above this can be submitted by email or post



Bridging Tasks Unit 3: Using Social Media in Business

BTEC Level 3 Information Technology does not require any previous knowledge of IT and computer systems however if you have taken Computer Science in Year 11 some aspects will be familiar.

The tasks that are in purple are required for submission

Unit 3: Social Media

Our first unit in Year 12 is the Social Media unit. The purpose of this bridging project is to broaden your knowledge of social media, considering why and how we use social media in a business setting to help promote products and services.



Social media has become hugely popular and many millions of people have signed up to accounts on social media websites. Each site has its own particular features and the sites are constantly developing and adding new facilities to keep existing users engaged and to attract new members.. Each social media site has its own unique features and structure to make it different form others.

Task 1 : Social Media Use

Choose 2 businesses from different industries and review their use of social media

You should present your work as a presentation or report it should include images from the business websites and social media accounts

Your project portfolio should include:

1. Introduction naming the 2 businesses and why you chose them
2. The target audience of the business – a brief outline of their typical customer group
3. The social media the business uses and why you think they use this social media
4. Examples of posts on different types of social media for each business explaining their content and effectiveness you could discuss for example:
 - Purpose of post – is it promoting the product/service, is it information ...
 - Tone of post: funny serious, informative,
 - Content – video, images, text, poll
 - Likes, shares, use of #
 - Does it link to other social media, back to the website
5. Do you think the business have a good social media presence, why?
6. Include references –record the web addresses you used.



Tip: When you choose a business go on to their website and check their social media presence

e.g. on the Tesco's home page if your scroll to the bottom you will see images of the social media they use

Check the business website first to make sure you will have plenty to research



Remember you are commenting on the business use of social media and not how you use it.

Bridging Tasks Unit 1: Information Systems

Unit 1: Information technologies



The purpose of this bridging project is to begin to build your base knowledge of computer systems.

Go to <https://www.knowitallninja.com/courses/information-technology-systems/#>

The first 4 lessons on this course do not need a subscription

Task 2 : Digital Devices

Complete the lessons on Digital Devices in IT Systems including the videos, text content and quizzes as you do this create a project portfolio

Your project portfolio should include:

- An introduction
- Types of digital device (e.g. multifunctional devices, personal and mainframe computers, mobile devices, servers, entertainment systems, digital cameras, navigation systems, data capture and collection systems, communication devices and systems)
- The function and use of digital devices (e.g. education and training, personal, social, retail, organisational and creative)
- A summary and a record of your actual results from completing the quizzes.

Other useful sites to support this work are:

- <https://www.bbc.co.uk/bitesize/guides/z2c82hv/revision/1>

Task 3: Challenge: Applying your understanding

Making use of the information you have gathered on the devices covered :

Choose one of the following areas : education and training; personal; social; retail; organisational use – business operations, internal and external dissemination of information; creative.

Once you have chosen your area, consider how digital devices have developed to and changed it.

You should think about:

- The development of devices for this area
- The impact they have had
- Were they needed – In your opinion have they had a positive impact and why

Your work should be presented in a way that you can present to others e.g. PowerPoint or a report

Useful sites to start you off....

Amazon factory tours, watch the videos <https://www.aboutamazon.co.uk/amazon-fulfilment/tour-an-amazon-fulfilment-centre>

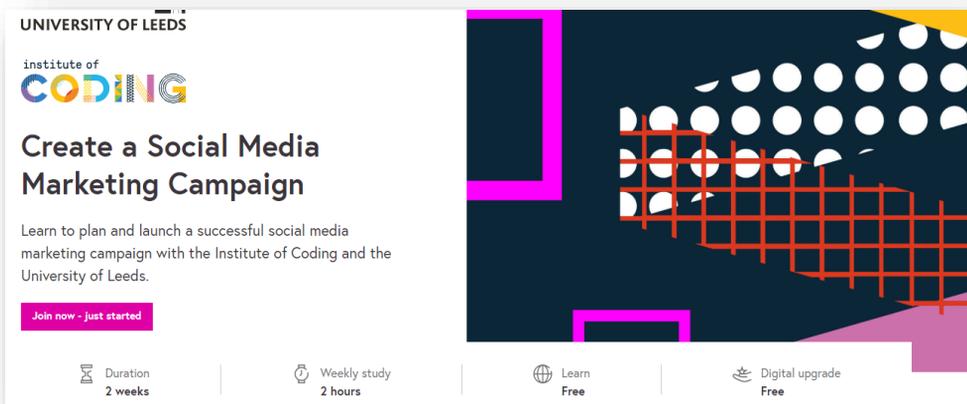
<https://econsultancy.com/examples-digital-technology-in-retail-stores/>

Bridging Tasks Optional Online Courses to Support Level 3 IT

In Year 12 we study specifically for Unit 2 and Unit 3, although Unit 1 is constantly referenced as it requires a broad knowledge and understanding of the use of Information Technology today. The following 2 online courses support these units are **optional** but maybe of interest to you to begin to develop your skills before we return.

Unit 3 Social Media

In this unit you will complete a marketing campaign for a small business using social media. This short course gives you a background into Social Media Marketing.



<https://www.futurelearn.com/courses/create-a-social-media-marketing-campaign?fbclid=IwAR0PrJ8cmZK10r8plb1KXu4CBU9y7jQWyd5e1nDXjGwBMxe6VOvdbOOEEIA>

Unit 2 : creating Systems to Manage Data

This course from Global Learn Free (edu.glf.org) is less interactive but does give you a background into databases to help your understanding of what they are, why we use them and some key terms to get a head started



<https://edu.gcfglobal.org/en/access2016/introduction-to-databases/1/>

Film and Book Recommendations

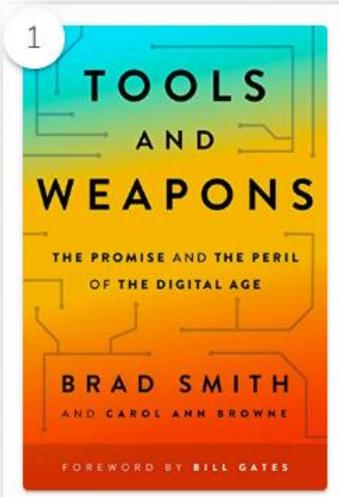
Kick back this summer with a good read. The books below are all popular books about information technology in the modern world



The Social Network (2010)

Directed by David Fincher

In October 2003, 19-year-old [Harvard University](#) student [Mark Zuckerberg](#) is dumped by his girlfriend Erica Albright. Returning to his dorm, Zuckerberg writes an insulting entry about Albright on his [LiveJournal](#) blog. He creates a campus website called [Facemash](#) by hacking into college databases to steal photos of female students, then allowing site visitors to rate their attractiveness. After traffic to the site crashes parts of Harvard's computer network, Zuckerberg is given six months of [academic probation](#). However, Facemash's popularity attracts the attention of Harvard upperclassmen and twins [Cameron](#) and [Tyler Winklevoss](#) and their business partner [Divya Narendra](#). The trio invites Zuckerberg to work on [Harvard Connection](#), a social network exclusive to Harvard students and aimed at dating.



Tools and Weapons

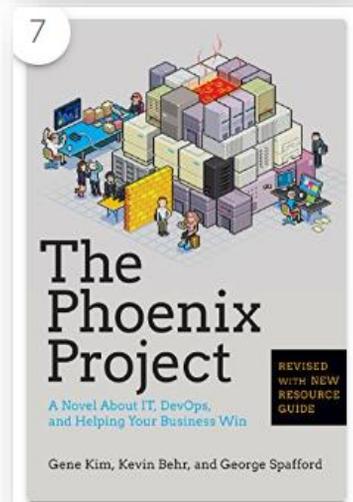
The Promise and the Peril of the Digital Age

[Brad Smith](#), [Carol Ann Browne](#)

| 2019 |

"A colourful and insightful insiders' view of how technology is both empowering us and threatening us. From privacy to cyberattacks, this timely book is a useful guide for how to navigate the digital future." —Walter Isaacson

From Microsoft's president and one of the tech industry's broadest thinkers, a frank and thoughtful reckoning with how to balance enormous promise and existential risk as the digitization of everything accelerates.



The Phoenix Project

A Novel about IT, DevOps, and Helping Your Business Win

[Gene Kim](#), [Kevin Behr](#), [George Spafford](#)

| 2013 |

Bill is an IT manager at Parts Unlimited. It's Tuesday morning and on his drive into the office, Bill gets a call from the CEO.

The company's new IT initiative, code named Phoenix Project, is critical to the future of Parts Unlimited, but the project is massively over budget and very late. The CEO wants Bill to report directly to him and fix the mess in ninety days or else Bill's entire department will be outsourced.

With the help of a prospective board member and his mysterious philosophy of The Three Ways, Bill starts to see that IT work has more in common with manufacturing plant work than he ever imagined.

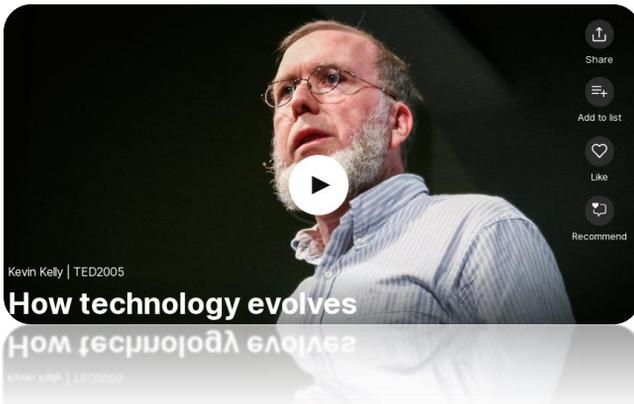
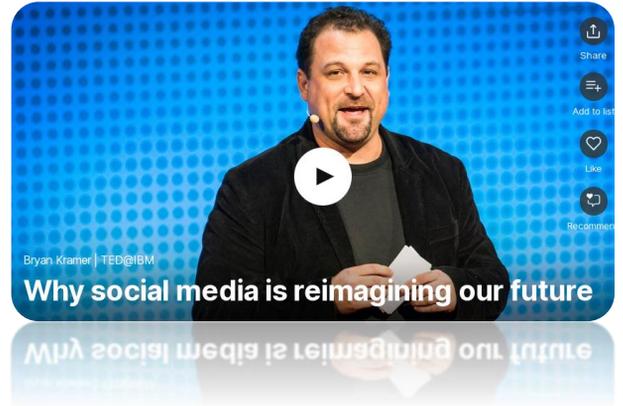
Related 'TED Talks'

If you have 30 minutes to spare, here are some great presentations (and free!) from world leading scientists and researchers on a variety of topics. They provide some interesting answers and ask some thought-provoking questions. Use the link or scan the QR code to view:

How social media is reimagining our future

https://www.ted.com/talks/bryan_kramer_why_social_media_is_reimagining_our_future

Bryan Kramer believes that social media is so popular because it allows us to control our personal brand: aligning the perceptions others have of us with our perception of ourselves. Concluding with a live Twitter experiment to test the true reach that sharing can have, he makes a case for the use of social media, and -- in the process -- illuminates the reason over 700 million photos and videos are processed on Snapchat every day..



How technology evolves

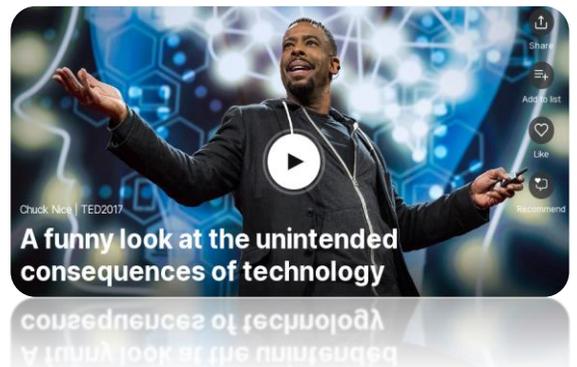
https://www.ted.com/talks/kevin_kelly_how_technology_evolves?language=en

Tech enthusiast Kevin Kelly asks "What does technology want?" and discovers that its movement toward ubiquity and complexity is much like the evolution of life.

A funny look at the unintended consequences of technology

https://www.ted.com/talks/chuck_nice_a_funny_look_at_the_unintended_consequences_of_technology?language=en

Technology should work for us, but what happens when it doesn't? Comedian Chuck Nice explores the unintended consequences of technological advancement and human interaction -- with hilarious results.



There are many more this is just a taster and a great way to build your wider understanding of the subject

BTEC Level 3 in Information Technologies

Transition Baseline Assessment

The following 40 minute test is designed to test your recall, analysis and evaluative skills and knowledge. Remember to use your exam technique: look at the command words and the number of marks each question is worth. Complete and return by email or post to Mrs Barton

1. Personal computers include devices like desktops and laptops. However, there are some fundamental differences between a desktop and laptop. List three features of a laptop that differ from a desktop. (3 marks)

1. _____
2. _____
3. _____

2. Servers are not necessarily more powerful than desktop computers (though they usually are). However, there are ways in which server hardware is usually different to desktop hardware. Identify three of these differences below. (3 marks)

1. _____
2. _____
3. _____

3. Mobile devices usually make use of system-on-a-chip. Identify three components of a computer that you can find on the microchip used in system-on-a-chip. (3 marks)

1. _____
2. _____
3. _____

4. Different types of computer exist as they are specialised for different types of task. In the table below, give an example use for each of the different types of digital devices listed. (4 marks)

Device	Example
Personal Computer	
Server	
Mobile Devices	
Entertainment Systems	
Navigation Systems	

5. Multifunctional devices are capable of performing more than one specific function, often both input and output. Identify below three examples of multifunctional devices. (3 marks)

1. _____
2. _____
3. _____

6. Data capture and collection devices are commonly used on an EPOS till system. On the drawing below, add annotations to describe how different data capture & collection devices would be used. (4 marks)



7. Communication devices are used to move data between two other devices (e.g. two computers). Identify two example communication devices below. (2 marks)

1. _____
2. _____

8. Different types of computer exist as they are specialised for different types of task. In the table below, give an example use for each of the different types of digital devices listed. (4 marks)

Device	Example
Multifunctional Devices	
Digital Cameras	
Data Capture & Collection Systems	
Communication Devices & Systems	

9. Retail is one of the areas that has really benefited from a wide range of digital devices. In the table below, identify three example devices used by shops, and what they're used for. (3 marks)

Device	Use

10. Use your answer to questions 9 to explain the benefits and drawbacks to the customer and business of the use of developments in technology in retail. You can use more than the examples given in question 9 in your answer. (10 marks)

Type or write your answer in the space below – you can use additional sheets