

IT AND

DIGITAL MEDIA

SUMMER PROJECTS **YEAR 11 STUDENTS**

BTEC LEVEL 1
INTRODUCTORY
CERTIFICATE IN
INFORMATION
TECHNOLOGY



HEART OF
**WORCESTERSHIRE
COLLEGE**

KICK START YOUR STUDY AT HOW COLLEGE WITH ONE OF OUR CURRICULUM BRIDGING PROJECTS

Contents

- 3. Course Breakdown
- 3. Overview of Units
- 4. Work Experience
- 4. Work Experience Questions:
- 5. Course Related Tasks
- 5. Task 1: Cyber Security Analyst
- 10. Task 2: Smart Technology Comparison
- 11. Task 3: Beat the Score!
- 12. Task 4: IT Word Search
- 13. Functional Skills - English & Maths
- 13. Maths Questions
- 16. English Reading Task
- 19. Student Rules & Standards
- 20. Meet the Staff

Course Breakdown

In order to obtain your qualification in IT Digital & Media Level 1, you'll be required to undertake and pass 5 units.

2 of these units aren't course IT specific but are needed to help you improve your organisational skills and plan for your future at HoW College and beyond.

| Overview of units | | |
|--|--|---|
| Unit: | Description: | Evidence: |
| 1. A1 - Being Organised | In this unit you'll learn about and explore different techniques to help improve your organisation skills. | Workbook showing techniques and skills you've used to improve your organisational skills. |
| 2. A2 - Developing a Personal Progression Plan | What will you do after this course? This unit will allow you to plan the next steps your future self will thank you for. | Workbook identifying a progression goal, skills and behaviours needed to meet progression goal and areas you'll need to develop, in order to meet chosen progression. |
| 3. IT6 - Using Digital Communication Technologies | You'll learn how to use different digital communication methods for different purposes. | Workbook and video footage showing your use of emails, social media and audio-visual (AV) communications. |
| 4. IT7 - Solving Technical IT Problems | Don't you hate it when your computer crashes and restarts? In this unit you'll learn steps you can take to rectify these faults. | Workbook containing videos, images and screenshots. It will show how you've supported IT users with technical issues including a log of support calls. |
| 5. IT9 - Creating a Website | You use websites all the time. This unit will allow you to learn about the components of a website, the code behind the scenes and design a website of your own. | Workbook containing annotated screenshots of your website design, completed website and review of completed website. |

Work experience

You will be expected to complete 70 hours of work experience throughout the duration of your course. This would ideally be within the IT/Media industry. However, the College understands this won't be possible for all students, therefore you'll have the choice to obtain work experience in any area/industry.

It's your responsibility to find your own work experience. Now is this time for you to start thinking of places where you'd like to complete this. You're not alone, the college will provide you with any tools and support to ensure you successfully complete this.

Over the years our staff have made some fantastic relationships with local businesses for our students to access. Past students have completed work experience at The Arena, GAME, IT Departments in schools and many more.

Work experience questions:

1. Have you taken part in any work experience/volunteering before? If so, where?

2. You'll be expected to complete 70 hours work experience. Do you have an idea of where you would like to complete this? Explain why.

3. What skills would you like to gain from completing your work experience hours?

Course Related Tasks

Task 1: Cyber Security Analyst



Instructions:

Create a **4-slide** presentation which gives information about the role of a **Cyber Security Analyst**. Include information on the following:

- Title (slide 1)
- Description of the role (slide 2)
- Qualifications, skills and behaviours needed (slide 3)
- Salary, including yearly, monthly and weekly. You can use a salary calculator for this if you want, just Google "Salary calculator" (slide 4)

Be sure to **use your own words**, include images, use different font colours and sizes to make the presentation interesting.

A website to help: www.prospects.ac.uk/job-profiles/cyber-security-analyst

Insert a screenshot of each of the slides on the following pages. You can use the **Snipping Tool** or the **PrntScn** button to do this.

Screenshot of slide 1

Screenshot of slide 2

Screenshot of slide 3

Screenshot of slide 4

Task 2: Smart Technology Comparison

Using the YouTube clip below and your own research, **compare** the 2 smart watches (Fitbit Versa 2 vs Apple Watch series 3).

You will need to compare things such as: practicality, battery, design, etc. For the conclusion write a paragraph explaining which you prefer and why based on the research you carried out.

YouTube Link: <https://bit.ly/35mVzXi>



| Fitbit Versa 2 vs Apple Watch 3 | |
|---------------------------------|----------------|
| Apple Watch | Fitbit Versa 2 |
| | |
| Conclusion: | |


Task 3: Beat the Score!

Instructions:

1. Navigate to: <https://bit.ly/2VTaZiX>

Pro Tips:

- You can take more than one go!
 - Use the abilities you unlock to help you
 - Time matters! Be quick and get more points
2. Take a screenshot of your score and paste in “Your score box”

| Stefan's Score | Your score |
|--|------------|
| <div><div>Game Summary</div><div><div></div><div><div>stefan.graham</div><div>Points 16690</div><div>Final Rank 1/23</div></div></div><div><div>Play again</div><div>Find a new quiz</div></div><div><div>Performance Stats</div><div><div><div>100%</div></div><div>Accuracy</div></div><div><div><div>15</div><div>Correct</div></div><div><div>0</div><div>Incorrect</div></div><div><div>0</div><div>Unattempted</div></div></div><div><div><div>7.3 s</div><div>Avg. Time / Question</div></div><div><div>12</div><div>Longest Streak</div></div></div><div><div>Review Questions</div><div>Click on the questions to see answers</div><div>Study Flashcards</div></div></div></div> | |

Task 4: IT Word Search

Technology Terms*

B J B I O P L L D W P Y X A G E S O F T W A R E
 R O G H Q U N Z E J K V K L Q Z W M T P F R U E
 H Z X S B P B S F T W K F E U E K Y S Z W I H D
 H Y A Q G C N O B U P G R A D E P N L P H T X T
 I L R H K B J Y E S U O M X G H G N H S F V K R
 X E V I R D D R A H C Q V L N O I T C N U F A O
 R G T P R I N T E R I S R E D L O F M P D D Z S
 Y H Q O P C U W P T S H U T D O W N O V M B T S
 T D S I S N Z Q T Q B P U Q I X Y H U T Z T U E
 P I A Q B O O T U P Y S S K Q C T A S Z J R D C
 B P F V C U V X C N V X X Y K S T V E I M O O O
 E P V D A E R M O T H E R B O A R D P F N P R R
 M E M O R Y L A Y W K Z S E L I F O A U W B F P
 W F J V E V T P X F E M O Y D L M Q D Q A S J X
 T B E N J U D R A O B Y E K B J A S Z Y I U T X
 G R A P H I C S D E Z Z N I T L G M V D C F D H
 I O G E G Z R K G R Q W K T O J Q O K N O E D A
 M O N I T O R O H A C C O M P U T E R I N K V V
 P P D J J D E I D W T S K Q M V K R H G S S P D
 O K L V J U S Q C D X U P C S N X O S O P G H Y
 B G P H D Q E R I R G U W V C B R A W L U N O Z
 E J H L F M X L T A N X H Y N O Z W J Q B F J F
 X S H G H B L G R H N O I T A C I L P P A P D A
 N L J U P S T U C T R O H S D T U Y T L N L N Y

APPLICATION BOOT UP COMPUTER CPU FILES FOLDERS FUNCTION GRAPHICS
 HARD DRIVE HARDWARE ICONS KEYBOARD LOG IN MEMORY MONITOR MOTHERBOARD
 MOUSE MOUSE PAD PRINTER PROCESSOR SHORTCUTS SHUT DOWN SOFTWARE UPGRADE
 USB PORT

| Explain what these words mean in relation to IT | |
|---|--|
| Motherboard | |
| Shortcuts | |
| Hardware | |
| Hard drive | |

Functional Skills - English & Maths

If you've not obtained a GCSE grade 4 or above in English and Maths, you will be required to attend mandatory English and Maths lessons each week. This is another opportunity for you to get the grades you need to progress beyond a level 1 course and make you more employable after you leave college.

These lessons will take place one a week for 2 hours and the lessons will run the duration of course. The lessons will cover a range of topics to help you build up confidence and fulfil your potential.

To help you become familiar with functional skills we would like you to answer the questions below as best as you can! There will be 3 topics covered – Maths, English Reading & English Writing.

Maths Questions

1. Lyn moves to a new flat.

These are the amounts she spends each month on rent and bills.

Rent: £679 **Bills:** £138

Calculate the total of these amounts.

Show your working and your answer below:

Answer:

2. Lyn pays for an internet contract.

How much will Lyn pay in total for the internet contract?

Show your working and your answer below.

Answer:

3. Monique wants to buy cleaning liquid for the flat.
She can choose 1 large bottle or 2 small bottles.

| Bottle size | Amount in bottle: |
|--------------|-------------------|
| Large bottle | 1 Litre |
| Small bottle | 429ml |
| Small bottle | 429ml |

Does 1 large bottle have more liquid than 2 small bottles?
Show your working out below.

Answer:

4. In June Gemma paid £68 for her electricity bill.
In July she will pay 5% more.
Workout Gemma's electricity bill for July?

Answer:

5. Daniel has these test results.

| Test: | Results: |
|-----------------|----------|
| Public Services | 46% |
| Maths | 14/25 |
| English | 13/20 |
| Art and Design | 6/10 |

His tutor wants to compare these results.
List these results in order from best to worst

6. Bill is a builder.

On Monday he made mortar mix. He used 24kg of sand and 5kg of cement.

On Tuesday Bill will make the same type of mortar mix. He will use 36kg of sand.

How much cement does he need to make the same type of mortar mix?

Show your working out below.

Answer:

7. Write 2.71828 correct to 3 decimal places?

Answer:

8. John works Monday to Friday. He buys lunch on his way to work.

Each day John buys a sandwich, a bottle of water and a bag of crisps.

| Shop A - any sandwich £2.85: | Shop B - £3 meal deal |
|------------------------------|--|
| A bottle of water 60p | Any sandwich, a bottle of water & crisps |
| A bag of crisps 85p | |

John thinks he will save more than £7.50 a week if he buys his lunch each day from shop B instead of shop A.

Is John correct? Show your working out below.

Answer:

English Reading Task

Instructions:

Please read the article below carefully. Answer the questions that follow relating to the article.

Is reading a thing of the past?

There is a popular opinion that most young people have no time for interests such as reading because they are glued to their mobile phones, messaging friends or using social media.

This opinion is not supported by the facts. JK Rowling's Harry Potter books and novels by David Walliams and Jacqueline Wilson sell in large numbers to under-sixteens. Writers such as Roald Dahl are still enjoyed by many young people whose parents would also have read his books.

What has changed is the way young people read. Now the majority of people under 30 in the UK say they prefer to read on a tablet, laptop or computer. Those young people who seem busy on their mobile devices may well be reading a book or an article. Modern devices mean that you can download novels by famous authors from the past, such as Charles Dickens, for free.

In the USA, an increasing number of readers now don't read printed books at all, with many young people signed up to online borrowing services. New technology means more people across the world have the opportunity to read material on screen. For example, in some parts of Africa and Asia, children can read many more books now than they did 10 years ago. This is because of the availability of mobile phones.

The changes in the way that people read have affected libraries in the UK. Nowadays fewer people go to libraries to borrow books and so libraries are finding new ways to encourage reading. Many now stock e-books and serve refreshments. Others are starting book clubs and workshops for young adults that include helping them to write their own blogs.

It's clear that, despite what some people think, young people still enjoy reading.

Questions:

1. The main purpose of Text A is to:
 - A. Advise you how to download a book
 - B. Argue that young people enjoy reading
 - C. Persuade you to attend a book club
 - D. Explain why parents read to their children

Answer:

2. According to Text A, which writer's books can you download for free?

- A. Jacqueline Wilson
- B. Roald Dahl
- C. Charles Dickens
- D. David Walliams

Answer:

3. According to Text A, which one of the following statements is correct?

- A. Book clubs are starting up in Asia.
- B. Tablets are widely available in Africa.
- C. Online borrowing is expensive in the USA.
- D. E-books are stocked in libraries in the UK

Answer:

4. According to Text A, why might young people have no time for reading?

5. Paragraphs are one of the features of Text A that help to present information. Name two other features of Text A that help to present information.

1.

2.

English Writing

Now it is time to express yourself!

Instructions:

Writing in paragraphs we want you to tell us 3 things:

1. Why have you chosen this course?
2. What do you hope to achieve from this course?
3. What do you feel you will gain from this course?

Please write in paragraphs and make sure you check punctuation and spelling.

Student Rules & Standards

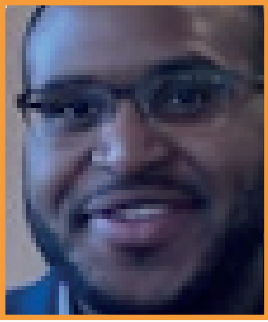
Students will be expected to:

- Show positive student behaviour and respect for College buildings, facilities and other people's property
- Take responsibility for their own learning, ensuring that they are always ready to learn with the appropriate tools, equipment, behaviour and attitude and complete tasks/ assignments within set time frames to meet given targets
- Treat each other with the utmost respect and consideration
- Be committed to promoting fundamental British Values including democracy, the rule of law, individual liberty and mutual respect and tolerance of those with different faiths and beliefs
- Attend all classes and study sessions on time, including Tutorials, Work Experience, English and Maths and all provision that enhances employability and personal effectiveness
- Familiarise themselves with College safeguarding processes and procedures, including the Prevent agenda
- Report any concerns in a timely and appropriate manner and act in the best interest of others at all times, including in matters of bullying, including cyber bullying and discrimination
- Maintain these Standards when off campus on work placement and on educational visits
- Act as ambassadors for the College, recognising that their behaviour contributes to the reputation of the College within the community
- Show on demand their ID badge when on College premises and/or when undertaking College activities

General standards

- Attendance 95% and punctuality 100% and inform the College of all absences
- Clothing must be appropriate for the curriculum area
- Comply with all health and safety guidelines and standards for the curriculum area
- Food and drink must not be consumed during lessons
- Refrain from copying work, using mobile phones or personal electronic devices unless instructed to do so
- Inform the College immediately of any change in your personal details
- Refrain from smoking, possession or distribution of illicit substances, consumption of alcohol, acts of violence or carrying any offensive weapon
- Comply with any requests by the Principal or delegated members of staff to search you or your belongings

Meet the Staff



Stefan Graham

BTEC Level 1 Certificate in
Information Technology –
Learning Skills Development
Officer – Worcester Campus



Joe Frampton

BTEC Level 1 Certificate in
Information Technology –
Learning Skills Development
Officer – Redditch Campus

Indicative time for this project:

We recommend you spend roughly 10 hours on this project.

Instructions on how to submit this:

IT & Digital Media Bridging Unit: <https://driveuploader.com/upload/FMYUk4DeLE/>

Whether you are submitting a written document or a video file, please ensure you include your name and email address so we know how to contact you. If you have trouble submitting your work, then please feel free to contact Stefan Graham who will help you with any problems, his contact details are **sgraham@howcollege.ac.uk** or phone on **01527 572720**.

How will I benefit from this project:

By completing this project, you will gain an understanding of a number of key skills that link to your chosen course. This will also allow the course tutor to look at the level of your work, commitment and will support the feedback offered to you at the start of the course.

What can I expect to get back after I submit my project work:

We will acknowledge receipt of your submission once we have received it, and a member of the teaching team will give you some feedback when the new term starts later in the year.

Key information you should include:

Your name

Your email address

A contact telephone number