

YEAR 12 – BRIDGING UNITS

CAMBRIDGE TECHNICALS IN IT



ST HILDA'S
COLLEGE

The 6th Form
@ St Hilda's

BRIDGING
UNITS

Name:

Anything is
POSSIBLE

Welcome to IT

Setting yourself up for success

So, you have chosen to undertake the Cambridge Technicals in IT course at KS5. In preparation for the start of the course in September, I have designed a series of tasks for you to complete in order to 'bridge the gap' between what you already know and what we will be taking forward onto the course you have chosen to study. **Please take all 3 completed tasks to your first timetabled IT lesson in September!**

Preparation

Between now and the beginning of your studies here at St. Hilda's, it will be helpful to get prepping for the course you will undertake so the following tasks are designed to help you to familiarise yourself with knowledge you may have already studied at KS4.

Task 1: Emerging Technologies

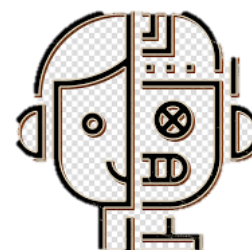
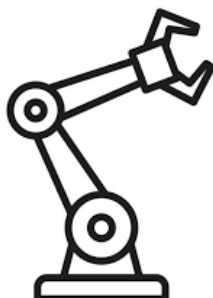
In this task you get to investigate any area of emerging computer technology that interest you.

Examples include:

- Artificial intelligence
- Robotics
- Automated self-driving cars
- Augmented reality (AR) and virtual reality (VR)

Create a short PowerPoint presentation explaining your chosen technology under the following headings:

- What is it?
- What are the benefits of this technology on society?
- What are the risks of this technology on society?
- Your conclusion on what the technology means for the world 10 years from now



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Task 2: Security Threats

Now I would like you to explore the options available for insuring your devices against security threats. Research the potential threats and compare the different physical and digital security you can use to protect your device and your data. You can use a table to evidence this.

Threats may include, but not limited to:

- Phishing
- Hacking
- Viruses
- Trojans
- Social engineering

Physical security may include, but not limited to:

- Locks
- Biometrics
- RFID
- Privacy screens

Digital security may include, but not limited to:

- Anti-virus
- Firewalls
- Anti-spyware
- Encryption
- Username/password



Task 3: Careers in IT

Let's do some research on the many roles in IT so you can learn about the exciting career choices you can make when you are an IT professional.

Take this short career quiz which will match your answers to jobs that may suit you.

<https://www.bcs.org/it-careers/tech-job-quiz/>

Software Developer

Cyber Specialist

Cloud Architect

UI designer

Project Management

Computer Forensics

**Web
Design/Development**

**Applications
Development**

Choose any 2 IT jobs that you are interested in (some options are listed above). Research the skills, knowledge and attributes you need for each. Focus on the pathway you would need to take from now until you get the job including:

- Education
- Training
- Experience
- Personal qualities

This can be evidence as a poster for each job role.