



SUMMER BRIDGING WORK 2023

Summer Bridging Work is an important part of your transition to Wilberforce Sixth Form College. This piece of work will count towards your effort grade. Please complete your summer bridging work in time for the start of term.

You are required to present evidence electronically and submit this to your subject teacher during your first lesson.

Computer Science

OVERVIEW OF SUBJECT

The world of computer science continues to develop at an astonishing rate. The challenge for you as a computer scientist is to be able to respond to this fast-changing world and to develop the high-level knowledge and skills that will help you to understand technology that will be developed in the future.

Maybe you have always liked to solve problems or decipher codes. Perhaps you have a knack for learning new languages, or maybe you were intrigued enough about your computer to rip the cover off and tinker with the inner workings. If so, computer science might be an ideal career choice for you.

The most important aspect of computer science is problem solving, an essential skill for life. Computer scientists theorise, design, develop, and apply the software and hardware for the programmes we use day in day out. Computer scientists are in demand and their salaries reflect this.

ENTRY CRITERIA

You must have a minimum of five GCSE grades 9-4 and a minimum GCSE average of 5.3. You will also need a grade 4 in GCSE English Language, a grade 5 in GCSE Maths and a grade 5 in a Science subject.

TASK 1 – LITERACY TASK (MAX. 500 WORDS)

A small company requires new infrastructure for 2 PC rooms. Both PC rooms will be used for standard office-based coursework with one PC room being for Computer Aided Design. The rooms will need to be appropriately networked for both wired and wireless connectivity. They will need to have access to an A3 printer, photocopier and a router and switch.

Your task is to research the hardware and software required to implement these rooms.

You will need to justify to the business manager your choices.

TASK 2 – NUMERACY TASK

As an extension of the Literacy Task above, produce an itemised breakdown of the costings of each item of computer hardware.

How much money will you spend on each item of hardware. How many pcs/rooms do you have to equip?

For this task, you have been allocated a budget of £5,000.

As part of this task, you are also required to JUSTIFY your spending choices.

TASK 3 – PROGRESSION OPPORTUNITIES (MAX. 200 WORDS)

Produce a poster showing three potential job profiles for possible careers within the computing industry. You should include:

- What the job involves
- Potential salary
- Working Hours
- Skills

Use this website to help you: <https://www.prospects.ac.uk/job-profiles/browse-sector/information-technology>

PLEASE COMPLETE ALL THREE OF THE ABOVE TASKS AND SUBMIT YOUR ANSWERS HERE:

<https://forms.office.com/e/CiDcVS5L1y>

If you have any queries regarding your Summer Bridging Work, please contact me via email DJH@wilberforce.ac.uk
I will aim to respond before your enrolment appointment.

Kind regards

Mr. David Hastings
Faculty Head for Digital, Engineering and Sport