Queen Elizabeth's Girls' School
Educating Women of the Future
Founded in 1888

Computer Science FAQs

Will Computer Science be hard as I did not study it in Year 9?

We actually covered the Key Stage 3 curriculum in Year 7 and 8 (with some cross curricular aspects being covered in other subjects such as Design Technology) and so you won't be at a disadvantage. The starting point for GCSE is about ensuring you are confident with the basics before moving forward and so there is no need to worry. There will be time to recap relevant parts of Key Stage 3 but the course for GCSE is very different in comparison.

How much of the subject is practical based?

Although there is a theory unit, it is taught in a practical way and so all lessons in Computer Science will be delivered in a computer room, regardless of the topic currently being studied. This means that all of your work will be online and stored electronically as well.

Will I get to take a computer apart?

Yes you will! Under supervision however. It's important that you can see, touch and relate to the parts of the computer that we will be learning about so that you can have a deeper understanding.

Is it Computing or Computer Science?

A lot of students ask this - the GCSE course is Computer Science which is a broader term covering a range of topic areas. People often use the two terms interchangeably though.

I read that there's a Maths element - do I need to be good at Maths?

You don't need to be a strong Mathematician but the skills which are involved in Maths (eg problem solving, working methodically, a determination to find a solution) are very helpful and overlap with Computing. There is a small amount of Maths in terms of basic calculations but you will already have covered everything you need to know for this part so there's no need to worry.

I've never programmed/coded before and so I'm concerned that I might find it difficult

Don't worry! We will learn programming from the beginning and there will be lots of opportunities to progress at your own pace. Most of the students who are currently studying the subject have no or little programming experience and sometimes this is helpful as it means you can start to form good habits and develop good working practices from scratch. As is often the case when learning something new, it can be difficult at first but with practise it will become much easier.

I'd like to try some programming/coding first in order to see if I like it - can you recommend anything?

Yes, there are a lot of really good websites, many of them are free to use such as Code Academy (https://www.codecademy.com/learn/learn-python). We use Python to code in school.

Will there be a lot of writing involved in the exams?

The questions in the exams are very mixed from short response 1 or 2 mark questions to longer response analysis type questions of about 6 marks. There are no essay questions and both exams have 80 marks available and last for 1.5 hours.

I'm not really wanting to study Computer Science beyond GCSE, is it still worth studying it?

Absolutely! GCSE Computer Science is a well regarded course where you will develop skills that can be used in any subject area. Skills such as the ability to step back and break down a problem so that it can be solved, being able to persevere in difficult situations, thinking about things differently, are all transferable to most contexts. With so many careers involving Computing or computers, a GCSE in Computer Science can be very helpful indeed.

Will there be any departmental trips?

Yes, we usually take a trip to Bletchley Park to visit the National Museum of Computing. They have working models of most major computers since the 1940s, including the Colossus computer which was part of the film "The Imitation Game" and used to significantly reduce the length of World War 2. The museum also has working computer games consoles from the 1990s onwards which you can trial and then compare and contrast to what we use in the present day. It is a fantastic opportunity for some 'hands on' learning and a real highlight of the course.

What sort of careers can a qualification in Computer Science help with?

Obvious careers would be software developers, web developers, systems analysts (people who analyse how well a system works and recommend improvements or new solutions for clients), computer games designers, project managers and those working in networking or infrastructure. There are also many other careers that might not have been considered in fields such as artificial intelligence (a major growth area), e-commerce, social media companies, worldwide supply chains and buying. Computer Science qualifications are accepted globally and are well regarded. There are hundreds of options: https://www.careermatch.com/job-prep/career-insights/articles/majoring-in-computer-science-100-careers-to-consider/