# GCSE Computer Science

Computer science, or "CS," is a broad large subject. It blends all the "STEM" subjects of science, technology, engineering and math, and also includes design.

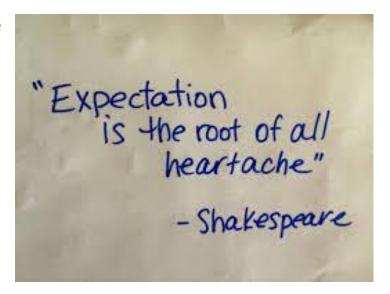
in year 10 & 11

### What can you expect?

This Ebacc GCSE will equip you with a range of transferable practical and theoretical skills:

- Programming skills in a modern language
- An understanding of how computers and networks work
- Knowledge of cyber-security and how hackers attack systems
- Knowledge of becoming future e-commerce entrepreneurship
- Becoming a future game developer
- Becoming a robotics programmer
- And many more.....

By increasing access to CS for all year 9 as early as possible, we can help them prepare for the jobs of today and tomorrow.



### What are the exams/assessments like?

#### Paper 1: Computer systems 1 hour 30 minutes, 50%

Introduces students to the central processing unit (CPU), computer memory and storage, data representation, wired and wireless networks, network topologies, system security and system software. It also looks at ethical, legal, cultural and environmental concerns associated with computer science.

#### Paper 2: Computational thinking, algorithm and programming 1 hour 30 minutes, 50%

Students apply knowledge and understanding gained in component 01. They develop skills and understanding in computational thinking: algorithms, programming techniques, producing robust programs, computational logic and translators.

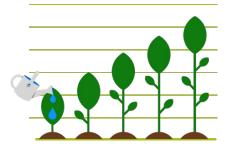
### **Computer Science is for everyone**

Knowledge and skills for success in careers across all sectors

Teaches important skills, such as:

Essential literacy for today's world

Opens doors to, and equalizes, opportunity for all



#### Creativity

- Problem solving
- Critical and flexible thinking
- Coordinating with others



Critical understanding for citizenship, ethics, and social good



### Where will it take you?

Careers in computer science (CS) are critical in shaping the world we live in and solving some of its biggest challenges. Our school recognises the importance of offering computer science courses.

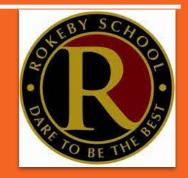
#### Computer science + student = a bright future.

Not only does CS open the door to all sorts of amazing careers, but it also gives you skills that are in very high demand. From games developer to manager of IT and communications services, you'll have a range of opportunities open to you as a computer science graduate. Computer Science sharpens many transferable skills, such as analytical thinking and mathematics.

Do you want to solve crime? Keep us safe? Secure information?

Recent news: Billions of pounds are going to be spend in the next few years for a new centre dedicated to artificial intelligence and the creation of a national cyber force.

## Questions?



If you have any questions see Mr S Milki in Room G7

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Respect

Success

**Passion for learning** 

**Personal Challenge** 

**Harmony**