

COMPUTER SCIENCE

INTRODUCTION

Are you interested in the inner working of a computer? Are you someone who thinks logically and is able to solve complex mathematical problems? Keen to learn how to manipulate strings and read/write to text files? If the answer is YES, then a GCSE in Computer Science is for you! Where else can you learn the skills that are essential for the 21st Century?



THE COURSE

Component 1: *Computer Systems. Externally assessed worth 50% of the final mark.* Introduces you to the central processing unit (CPU), computer memory and storage, 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.

Component 2: *Computational Thinking, Algorithms, and Programming. Externally assessed worth 50% of the final mark.* Here you will apply the knowledge and understanding gained in Component 1. You'll develop the skills and understanding in computational thinking: algorithms, programming techniques, producing robust programmes, computational logic, translators and data representation. For more information about the course, please click [here](#).

NEEDED SKILLS

To be a successful computer scientist a strong understanding of mathematical principles is essential. These mathematical principles will be utilized to devise solutions to complex problems. It's typical to experience failure when devising these solutions, therefore resilience and independence are essential learning habits to succeed in this course.

THE FUTURE

Thanks to your newly acquired technical knowledge and analytical skills (not to mention the fact that you'll now be a master at problem-solving) when it comes to potential careers, the world is pretty much your oyster. Traditional career pathways include:

- Finance
- Cybersecurity
- Programmer



Scan the QR code to watch a video with more information

For further information on Computer Science, please contact Mrs Valibhai, Head of Computing.