COMPUTER SCIENCE

at SCGSG

Mrs C. Rudd

AQA - Specification 8525

The course:

This course will build on the knowledge, understanding and skills established through the Computer Science elements of the Years 7-9 programme of study.

The content has been designed not only to allow for a solid basis of understanding but to engage you and get you thinking about real world application.

Computer Science encourages students to:

- Understand and apply the fundamental principles of Computer Science, including abstraction, logic, algorithms, and data representation.
- Develop practical programming skills using Python to solve problems, including designing, writing and debugging programs.
- Think creatively, innovatively, analytically, logically and critically.
- Understand the components that make up digital systems, and how they communicate with one another and with other systems.
- Understand the impacts of digital technology to the individual and to wider society.
- Apply mathematical skills relevant to Computer Science.

Where are they now?

After completing the A-Level Computer Science course, our most recent leavers have progressed to some of the top universities in UK such as:

- BA (Hons) Computer Science at Cambridge
- BSc Computer Science at Durham University
- Degree Apprenticeship with PwC at the University of Birmingham (degree paid for by PwC)

A-Level Computer Science prepares you very well for a range of degrees including:

- Computer Science
- Software Engineering
- Computer Games Development
- Information Systems
- Forensic Computing
- Computer Technologies
- Network Management
- Web Design and Services

Course content:

	Content Overview	Weighting
Computer Systems	**Paper 1:** 80 marks 1 hour and 30 minutes Written paper (no calculators allowed)	50%
Computational Thinking, Algorithms & Programming	**Paper 2:** 80 marks 1 hour and 30 minutes Written paper (no calculators allowed)	50%
Practical Programming	Students are to be given the opportunity to undertake a programming task(s) during their course of study which allows them to develop their skills to design, write, test and refine programs using a high-level programming language. Students will be assessed on these skills during the written examinations, in particular component 02 (section B).	-