

Mulberry

Academy Woodside

OPTIONS SUBJECTS: GCSE Computer Science

HEAD OF DEPARTMENT

EXAM BOARD

OCR

BREAKDOWN OF MARKS

Exam - Paper 1 - Computer Systems 50%

Exam - Paper 2 - Computational thinking, algorithms and programming 50%

SKILLS

Computational Thinking
Programming
Counting in binary and hexadecimal
Converting between number systems
Calculating file sizes
Evaluating performance

VITAL INFORMATION

Your grade will be based on 100% on your written answers in the final exams
You must enjoy programming and have the resilience to keep trying even if you have been stuck on the same problem for ages. You must be prepared to make mistakes and to learn from them
You need a technical head to understand the programming techniques you will learn and a creative mind to put them together to develop a solution to a complex programming problem

CURRICULUM CONTENT

You will study the following topics:

Paper 1 - Computer Systems
Systems Architecture
Memory
Storage
Wired and Wireless Networks
Network Topologies, Protocols and Layers
System Security
Systems Software
Ethical, Legal, Cultural and Environmental Concerns

Paper 2 - Computational Thinking, Algorithms and Programming
Algorithms
Programming Techniques
Producing Robust Programs
Computational Logic
Translators and Facilities of Languages
Data Representation

CURRICULUM & CAREER PROGRESSION

NEXT STEPS

A-Level Computer Science

CAREERS

Full Stack Web Developer
Mobile Application Developer
Software Engineer
Systems Architect
Machine Learning Engineer
Data Engineer
Games Developer