

KS3

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# KS4

# Curriculum Narrative

We follow the AQA specification of Computer Science at GCSE level. Students are taught a high-quality computing syllabus which equips them to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, Science and Design and Technology, and provides insights into both natural and artificial systems. The core of computing is Computer Science, in which students are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, students are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that students become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. This exciting GCSE gives students many excellent opportunities to investigate how computers work and how they are used, and to develop computer programming-computational thinking and problem-solving skills.

# KS4

# Curriculum Map

Why choose CS  
 Course awareness  
 Base line Yacapaca tests  
 History of Computing  
 History of Software  
 History of Computer Games  
 Peer Assessment

Fundamentals of Algorithms  
 1 Introduction  
 2 Representing Algorithms  
 3 Efficiency of Algorithms  
 4 Searching Algorithms  
 5 Sorting Algorithms  
 Yacapaca exam assessment  
 Hour of code  
 Coding introduction

Computer Systems  
 1 Hardware and software  
 2 Boolean logic  
 3 Software classification  
 4 Systems architecture  
 Portfolio of work  
 Coding 1  
 Programming  
 Coding challenges

Data  
 Representation 1  
 1 Data Representation  
 2 Number Bases  
 3 Conversions  
 4 Units of information  
 5 Binary arithmetic  
 Test  
 Coding 2  
 Programming

Mock revision  
 Cyber Security  
 1 Cyber security  
 2 Cyber security threats  
 3 Detect & prevent threats  
 Advice  
 Website

Coding  
 Programming  
 Ethical, Legal, Environmental Impact  
 1 Impact of digital techT

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Curriculum Map

Year 7 PoS - <https://drive.google.com/file/d/13K6Esv5EGKjnZzPoteFNKzhNL7y8eGtb/view?usp=sharing>

Year 8 PoS - <https://drive.google.com/file/d/1nnLGbBXEe2NTD7MQzHRpXOBb3FC3cYcn/view?usp=sharing>

Year 9-10 PoS - <https://drive.google.com/file/d/1CQ-0Qn7zOM431Z2bK-bOhCpMlumhXxoT/view?usp=sharing>

Year 10-11 PoS - <https://drive.google.com/file/d/1iC90mxB8FYw1D1DUWq8rJSfd-wrfdWwH/view?usp=sharing>