| Subject: Computer Science | Components | | Composite | Mission statement |
|---|---|---|---|---|
| | What new knowledge do we introduce? | | What do students *do* with this knowledge? | By the end of year 11 a Sybil Andrews CS student will... |
| | Year 10 | Year 11 | | |
| Autumn | Introduction to the programming language Visual Basic (sequencing, selection, iteration, variables, string manipulation, data types) | Visual programming (how to make visual applications; windows form application using prior programming knowledge) | Students use the skills learnt throughout the topics and apply them in answering GCSE questions in their end of topic assessments. | Have good programming knowledge including the understanding of the various concepts needed to create a solution to a given problem. |
| Spring | Data Representation (number systems, character sets, sound, images, binary arithmetic) | Algorithms & Problem Solving (pseudocode, flowcharts, sorts, searches, trace tables) | | |
| Summer | Computer systems (logic gates, hardware, software, operating systems, translators, assembly language) | Data structures (arrays, multi-dimensional arrays, records) | | |
| Rationale for these specific components and composite outcomes: | The above topics follow the AQA specification outline | The above topics follow the AQA specification outline | | |
| How is challenge embedded into the KS4 curriculum? | | | How does the KS4 curriculum above build on prior knowledge from KS3 and adequately prepare the student for KS5? | |

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| Advanced tasks (mild, hot, volcanic) are used on the majority of lesson worksheets. | |
| | The KS3 curriculum has been derived from the KS4 exam board specifications. KS3 students are introduced to the skills needed to complete the work at KS4 |