

AQA A-Level Computer Science Curriculum Guide

Year 13

What will my son learn?		
<p>Autumn term</p> <p>Paper 1</p> <ul style="list-style-type: none"> • 10. Fundamentals of programming • 11. Fundamentals of data structures <p>Paper 2</p> <ul style="list-style-type: none"> • 14. Fundamentals of data representation • 15. Fundamentals of computer systems • 16. Fundamentals of computer organisation and architecture • 17. Consequences of uses of computing <p>23. Non-exam assessment – the computing practical project</p>	<p>Spring Term</p> <p>Paper 1</p> <ul style="list-style-type: none"> • 12. Fundamentals of algorithms • 13. Theory of computation • 22. Systematic approach to problem solving • Exam preparation <p>Paper 2</p> <ul style="list-style-type: none"> • 18. Fundamentals of communication and networking • 19. Fundamentals of databases • 20. Big Data • 21. Fundamentals of functional programming <p>23. Non-exam assessment – the computing practical project</p>	<p>Summer Term</p> <p>Paper 1</p> <ul style="list-style-type: none"> • Preparation for the exam using the preliminary materials provided by the exam board <p>Paper 2</p> <ul style="list-style-type: none"> • Exam preparation and revision <p>23. Non-exam assessment – the computing practical project</p>

How will my son be assessed?
<p>Paper 1</p> <p>This paper tests your son’s ability to program, as well as his theoretical knowledge of Computer Science from subject content 10 – 13 above and the skills required from section 22 above.</p> <p>External Assessment</p> <ul style="list-style-type: none"> • On-screen exam: 2 hours 30 minutes • 40% of A-level <p>Your son will be expected to answer a series of questions and write/adapt/extend programs in an electronic answer document provided by the exam board. They will issue preliminary material, a skeleton program and, where appropriate, test data, for use in the exam.</p> <p>Paper 2</p> <p>This paper tests your son’s ability to answer questions from subject content 14 – 21 above.</p> <p>External Assessment</p> <ul style="list-style-type: none"> • Written exam: 2 hours 30 minutes • 40% of A-level <p>You son will be expected to answer compulsory short-answer and extended-answer questions.</p> <p>Non-exam assessment</p> <p>The non-exam assessment assesses your son’s ability to use the knowledge and skills gained through the course to solve a practical problem. Students will be expected to follow a systematic approach to problem solving, as shown in section 22 above. Assessment:</p> <ul style="list-style-type: none"> • 75 marks • 20% of A-level

How can I support my son with Computing?
<ul style="list-style-type: none"> • Provide access to Python IDLE • Encourage your son to program for fun using online Python tutorials • Pupils should be encouraged to read around the subject. Parents can also assist by monitoring your son’s planner for homework and communicating with the teacher if there are any problems.

