

# AQA AS Computer Science Curriculum Guide

## Year 12

What will my son learn?		
<p><b>Autumn term</b></p> <p><b>Paper 1</b></p> <ul style="list-style-type: none"> <li>• 1. Fundamentals of programming</li> <li>• 2. Fundamentals of data structures</li> </ul> <p><b>Paper 2</b></p> <ul style="list-style-type: none"> <li>• 5. Fundamentals of data representation</li> <li>• 6. Fundamentals of computer systems</li> </ul>	<p><b>Spring Term</b></p> <p><b>Paper 1</b></p> <ul style="list-style-type: none"> <li>• 3. Systematic approach to problem solving</li> <li>• 4. Theory of computation</li> </ul> <p><b>Paper 2</b></p> <ul style="list-style-type: none"> <li>• 7. Fundamentals of computer organisation and architecture</li> </ul>	<p><b>Summer Term</b></p> <p><b>Paper 1</b></p> <ul style="list-style-type: none"> <li>• OOP</li> <li>• NEA project preparation</li> </ul> <p><b>Paper 2</b></p> <ul style="list-style-type: none"> <li>• 8. Consequences of uses of computing</li> <li>• 9. Fundamentals of communication and networking</li> </ul>

How will my son be assessed?
<p>Students will be internally assessed throughout the year with end of topic assessments and past papers.</p> <p><b>Paper 1</b></p> <p>This paper tests your son's ability to program, as well as his theoretical knowledge of Computer Science from the subject content 1 – 4 above.</p> <p><b>Internal Assessment</b></p> <ul style="list-style-type: none"> <li>• On-screen exam: 1 hour 30 minutes</li> </ul> <p>Your son will be expected to answer a series of short questions and write/adapt/extend programs in an electronic answer document provided by the exam board.</p> <p><b>Paper 2</b></p> <p>This paper tests a student's ability to answer questions from subject content 5 – 9 above.</p> <p><b>Internal Assessment</b></p> <ul style="list-style-type: none"> <li>• Written exam: 1 hour 30 minutes</li> </ul> <p>Your son will be expected to answer a series of short-answer and extended-answer questions.</p>

How can I support my son with Computing?
<ul style="list-style-type: none"> <li>• Provide access to Python IDLE</li> <li>• Encourage your son to program for fun using online Python tutorials</li> <li>• 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.</li> </ul>

