

Title of Course		Computer Science	
Level	A Level	Examination Board	AQA
What the subject is about	Computer Science is a discipline that seeks to understand and explore the world around us, both natural and artificial, in computational terms. Computer Science is particularly, but by no means exclusively, concerned with the study, design, and implementation of computer systems, as well as understanding the principles underlying these designs.		
What you will learn	<p>Over 2 years of study you will learn:</p> <ol style="list-style-type: none"> 1. Fundamentals of programming 2. Fundamentals of data structures 3. Fundamentals of algorithms 4. Theory of computation 5. Fundamentals of data representation 6. Fundamentals of computer systems 7. Fundamentals of computer organisation and architecture 8. Consequences of uses of computing 9. Fundamentals of communication and networking 10. Fundamentals of databases 11. Big Data 12. Fundamentals of functional programming 13. Systematic approach to problem solving <p>The subject content uses real-life contexts to help you to understand key computational principles, as well as develop your analytical, design and evaluation skills. The content also supports the unlocking of creative and logical thinking.</p>		
How you will learn	You will learn through a range of methods and opportunities, including individual and collaborative learning. You will complete mini-projects to prepare you for your own project.		
Independent learning	Throughout the course independent learning is fostered, and you will be expected to review and extend learning that takes place during lessons. Throughout the first module, independent learning skills are explicitly taught, including effective note-taking and research. Guidance is given throughout the course.		
Coursework and Examination Information	<p>There will be an on-screen exam, one written exam and a computing project all of which are assessed at the end of the course:</p> <ul style="list-style-type: none"> • Paper 1 – (On Screen Exam: 2 hours 30 minutes – 40% of final mark) - this paper tests a student's ability to program, as well as their theoretical knowledge of computer science from subject content 1 – 4 above and the skills required from section 13 above • Paper 2 – (Written Exam: 2 hours 30 minutes – 40% of final mark) - this paper tests a student's ability to answer questions from subject content 5 – 12 above • Computing Project – (Coursework– 20% of final mark) - the computing project assesses students' ability to use the knowledge and skills gained through the course to solve or investigate a practical problem. Students will be expected to follow a systematic approach to problem solving, as shown in section 13 above. 		
Your future career	<p>Computer Science helps you to build up modelling, problem solving, research, communication and analytical skills.</p> <p>Computer Science is the key subject in many STEM careers including Software Development, Project Manager, Database Administrator, Network Administration, Data Analysis, Web Designers and Application Developers.</p>		
Staff Contact	Mr Darren Pascall Teacher of Computer Science Darren.pascall@uaesouthbank.org.uk 020 7277 3000	Entry requirements	5A* - C grades including Grade 5 in Maths