COMPUTER SCIENCE
GCSE

INTRODUCTION
Computing and computer technology are part of just about everything that touches our lives, from the cars we drive, to the movies we watch, to the ways businesses and governments deal with us. Understanding different dimensions of computing is part of the necessary skill set for an educated person in the 21st century. Whether you want to be a scientist, develop the latest 'must have' application, or just know what it really means when someone says 'the computer made a mistake', studying computing will provide you with valuable knowledge.

WHAT WILL I LEARN?
Component 1 Computer Systems: Systems architecture, memory and storage, computer networks, connections and protocols, network security, systems software, ethical, legal, cultural and environmental impacts of digital technology.
Component 2 Computational Thinking, Algorithms and Programming: Algorithms, programming fundamentals, producing robust programs, Boolean logic, programming languages and Integrated Development Environments.

Programming: All students will be given the opportunity to undertake programming tasks during their course of study. They will use a high-level text-based programming language to do this, for example, Python.

ENTRY REQUIREMENTS
You will be expected to have a keen interest in Computer Science. This may mean that you have already written a computer program, designed a new app, actively read about cyber security issues or other related topics, set up a network at home, installed software on your PC, are able to trouble-shoot problems and fix issues that occur at home, for example. However, even if you have not done any of the above, but just enjoy computing lessons and have an inquisitive and investigative mind then this course could be for you.

HOW WILL I BE ASSESSED?
Assessment will take place at the end of Year 11 as follows:
Component 1: Computer Systems – examination. This is an exam focused on computer systems covering the physical elements of computer science and the associated theory, with a 1 hour 30 minutes written paper (50%).
Component 2: Computational Thinking, Algorithms and Programming – examination. This focuses on the core theory of computer science and the application of computer science principles, with a 1 hour 30 minutes written paper (50%).

FUTURE OPPORTUNITIES
Having a computing qualification will provide you with a foundation of knowledge, problem solving and logical thinking that will serve as a competitive advantage whatever career is chosen. Technologies continue to have a growing importance in this country and further afield. If learners want to go on to higher study and employment in the field of Computer Science, they will find that this course provides a superb stepping stone. Learners who have taken a Computing GCSE and who then progress to study the subject at A-Level or university will have a sound underpinning knowledge of this subject area.

GCSE Computer Science is one of the EBacc group of options.

FURTHER INFORMATION
Speak to Ms Samosa, Assistant Headteacher and Head of ICT, or your IT Teacher.
Full course details can be found at: https://www.ocr.org.uk/qualifications/gcse/computer-science-j276-from-2016