OPTIONS COURSE

COMPUTER SCIENCE

ACCREDITING AUTHORITY | OCR

QUALIFICATION	GCSE
FACULTY	**ICT, COMPUTING AND MEDIA FACULTY**
STAFF CONTACT	Mr Flaxman & Mrs McDougall

WHAT QUALITIES & SKILLS DO I NEED?

You need to have a good level of Maths (be on track for achieving a 3+ by then end of year 8 and a 5+ by the end of year 11) with strong problem solving skills. You also need to have a commitment to learning the theory of programming as well as completing practical work.

COURSE FOLLOWED

Computer Science

HOW IS THE COURSE ORGANISED & ASSESSED?

Component 1: Computer Systems

This unit covers knowledge about systems architecture, memory, storage, networks, protocols, security and software. This is assessed by a written paper of 1hr 30mins and is worth 50% of the marks.

Component 2: Computational Thinking, Algorithms and Programming

This unit covers knowledge about algorithms, programming techniques, computational logic, translators and data representation. This is assessed by a written paper of 1hr 30mins and is worth 50% of the marks.

Component 3: Programming project

This is where you develop your programming techniques, your ability to code a solution to a problem. You will need to design, code and test your program to complete a task set by your teacher. As part of this unit there will be a strong focus on writing and understanding pseudocode.

FREQUENTLY ASKED

WHAT IS THE PROGRESSION ROUTE FOR THE COURSE?

Successful completion of this course at grade 6 or above will allow you to continue to A Level Computing.

WHAT'S THE DIFFERENCE BETWEEN COMPUTER SCIENCE AND IT?

Computer Science is a programming course designed to teach you the skills and understanding for writing programs using Visual Basic programming code, e.g. creating software and applications.
Creative iMedia is concerned with using software, e.g. word processing, website design, databases, spreadsheets and graphics editing in order to complete tasks and make electronic products.

ARE THERE ANY EXAMS FOR EITHER COURSE?

Yes, the Computer Science has 2 exams, both worth 50% each and IT has 1 exam worth 25% of the total marks for ICT. These will be taken in year 11.

HOW MANY UNITS ARE THERE IN EACH COURSE?

- Computer Science has 2 exams
- ICT has 3 coursework units and 1 exam

WHAT CAREERS ARE LINKED TO THIS COURSE?

A range of exciting creative and technical careers such as Software developer, Programmer, Tester, Web developer, Information architect, Database Developer/Manager and Analyst are to name a few.

DO I NEED TO BUY ANY SPECIFIC SOFTWARE?

No, we provide the software in school for you to complete all the necessary tasks. Software is also available for use at home via the free Office 365 platform and via free download.

ARE THERE RECOMMENDED MINIMUM ENTRY REQUIREMENTS?

Computer Science is only advisable for those who have a good understanding of Maths and an expected year 8 grade of 3+ and year 11 GCSE grade of 5+ is a good guideline. Programming and problem solving skills are fundamental to this EBACC course. Students who are unsure about their suitability should discuss this with their Computing teacher.

WHAT WILL I GET OUT OF THIS COURSE?

The course is designed to inspire and enthuse learners to become more technology savvy and become producers of technology products rather than just consumers. Learners will be given the opportunity to gain a broad understanding and knowledge of computing, with an emphasis on programming and problem solving skills. The course will encourage personal development, motivation and confidence, through practical participation and by giving learners responsibility for their own projects.