ERASMUS DARWIN ACADEMY
Excellence for All

GCSE Computer Science

Aims

Computer Science is of enormous importance to the economy, and the role of Computer Science as a discipline itself and as an 'underpinning' subject across science and engineering is growing rapidly. Computer technology continues to advance rapidly and the way that technology is consumed has also been changing at a fast pace over recent years.

GCSE specifications in Computer Science should encourage candidates to be inspired, moved and challenged by following a coherent, satisfying and worthwhile course of study. They should help candidates to gain an insight into related sectors. They should prepare candidates to make informed decisions about further learning opportunities and career choices.

The Course

GCSE specifications in Computer Science must enable candidates to develop their understanding of current and emerging technologies, understanding of how they work and apply this knowledge and understanding in a range of contexts. They must apply their knowledge and skills to solve problems through the development of programs and evaluate the effectiveness of computer programs while developing the skills to work collaboratively. They will use their knowledge and understanding of computer technology to become independent and discerning users of IT, able to make informed decisions about the use and be aware of the implications of different technologies.

Assessment

Assessment overview for this course includes 2 written papers. Each paper contributes 50% towards the final GCSE. There is also a programming project which will give you an opportunity to develop your programming skills within the areas of design, writing, testing and refining. The exams will cover a range of computing topics and require a broad knowledge of computing to be successful. Topics that have been confirmed are programming and algorithms, data representation, Boolean logic, purpose of software, systems architecture, networks, cyber security, impacts on society of computing and characteristics of programming languages.

Choose this course if..

This exciting GCSE gives you an excellent opportunity to investigate how computers work and how they're used, and to develop computer programming and problem-solving skills.

You will do some in-depth research and practical work. You've got to be able to think logically, solve problems and be tenacious when the going gets tough. But it is also really creative and you'll get a real buzz out of getting something to work yourself, especially when programming.

Post 16 Opportunities and Careers

GCSE Computer Science can lead to A-Level Computer Science or the NEW Level 3 BTEC Information Technology qualification. A-Level Computer Science focuses on programming and computational thinking at its core. The BTEC National ICT award is part of a new suite of vocationally-focused BTECs. The Level 3 awards incorporate an extremely wide range of units equivalent to AS and A2 Level. These are flexibly structured to give candidates plenty of choice to form qualifications which can be highly individual to their personal aptitudes, interests and ambitions.

Exam Board Information

OCR GCSE Computer Science (9-1) – Specification code: J277