



ENFIELD GRAMMAR SIXTH FORM AQA A LEVEL COMPUTER SCIENCE



Who is this course for?

This A level is aimed at students who desire to learn about key technical and theoretical topics in computer Science and are looking forward to continue at university, apprenticeship or a future career in the computer industry.

What could it lead to?

This course will allow you to enrol on any degree course on computer science and leads to rewarding careers in software development, programming, networking and game development

What is the course about?

This course is centred in exposing all students to computational thinking and in-depth understanding of computer science. You will be studying these units over the 2 years: Fundamentals of programming, Fundamentals of data structures, Fundamentals of algorithms, Theory of computation, Fundamentals of data representation, Fundamentals of computer systems, Fundamentals of computer organisation and architecture, Consequences of uses of computing, Fundamentals of communication and networking, Fundamentals of databases, Big Data and Fundamentals of functional programming. It is a very intense course. It will require a lot of self-study to succeed. The course prepares you very well to have a head start at university. The course covers the latest changes in the computing world and it is very important that it is

How will I be assessed?

The A level has 2 written papers and non-exam assessment (NEA). Paper 1 and Paper 2, both, equate to 40% each of the final mark. The NEA is worth 20% and is begun in the final half term of Yr 12 and completed in Yr 13. Paper 1 focuses on problem solving, computational thinking, algorithm design and implementation and programming understanding and how it is applied. Paper 2 consists of computer systems, computer architecture, functional programming, relational databases, Big Data and data representation. NEA projects can range from developing a program to control and manipulate drones or a robot to an interactive website or an educational 2D/3D game.

Useful websites/further reading

AQA website for A Level Computer science

AQA AS and A Level Computer Science book by PM Heathcote and RSU Heathcote

AQA A level Computer Science Paperback by Bob Reeves

www.teach-ict.com

www.python3.codes

