Computer Science

Examination Board: OCR GCSE Computer Science Course Code: J276

Subject Lead – Mrs K Caroe

Students choosing this course must be working towards a Grade 7 in Mathematics.

GCSE Computer Science develops your understanding of current and emerging technologies, how they work and applying this knowledge and understanding in a range of contexts. You will use different programming languages to design, write and test computer programs to solve specific problems and develop a thorough theoretical understanding of Computing.

Assessment Arrangements

Students are assessed through two written examination and a controlled assessment (nonexam assessment) which is completed in examination conditions during lesson time.

Computer systems (01) (50% of marks) – 90 minutes written exam covering:

Systems Architecture • Memory • Storage • Wired and wireless networks • Network

topologies, protocols and layers • System security • System software • Ethical, legal,

cultural and environmental concerns

Computational thinking, algorithms and programming (02) (50% of marks) – 90

minutes written exam covering: Algorithms • Programming techniques • Producing

robust programs • Computational logic • Translators and facilities of languages • Data

Representation

Programming project – Year 10: Programming techniques • Analysis • Design •

Development • Testing and evaluation and conclusions.

Why study this course?

GCSE Computer Science will introduce you to what goes on behind the scenes, enabling

you to understand how the computer actually works when a program is running. GCSE

Computer Science is excellent preparation for a Level 3 Computing /ICT course or an

ICT Apprenticeships and there is a growing demand for ICT professionals who have

programming skills. To enjoy this course, you should be a confident mathematician

(target grade of A\*-B) who enjoys problem solving and has an enquiring mind-set.

Course Outline

Computer Systems and Programming: Here you will look at how data input into a

computer is handled and processed as well as Binary number systems and logic gates.

Students will also explore the different types of memory and how it works and examine

input, output and storage devices in a computer system.