Qualification: GCSE

Equivalent to: 1 GCSE (Grades 9 - 1)

Pearson Edexcel GCSE Computer Science (2020)

The course gives students a real in-depth understanding of how computer technology works. The

course places an emphasis on computer programming as a method of understanding theoretical

aspects of computer technology, as well as computer programming as a stand-alone pursuit. The

course moves from the fundamentals of how computer devices work, through to a firm foundation in

some of the key aspects of programming.

Course Content

• Component 01 –Principles of Computer Science Paper code: 1CP2/01

Component 01 focuses on the principles of computer science. It is an examined unit and makes

up 50% of the assessment total. Units include: Computational Thinking, Data, Computers,

Networks, issues and impacts.

• Component 02 – Computational Thinking, Algorithms and Programming

Component 02 is a written exam, focused on computational thinking and algorithms. Students

will be tested on the elements of computational thinking and logic. They are principally assessed

as to their ability to write, correct and improve algorithms. It is an examined unit and makes up

50% of the assessment total.

Indicative course cost: Nil. There are no compulsory trips, visits or other purchases.

Assessment

The course is made up of 2 units. Unit 1 “principles of computer science” is a paper-based exam

(50%).

The second unit “Application of Computational Thinking” is an onscreen practical programming/

coding exam.

Progression – Sixth Form / Further Education / Careers

The course provides excellent preparation for higher study and employment in the field of

computer science. The increasing importance of information technologies means there will be a

growing demand for professionals who are qualified in this area. Students who have taken a GCSE

in Computing and who then progress to study the subject at A Level or university will have an

advantage over their colleagues who are picking up the subject at these levels.

Who would enjoy and be successful on the course?

This course is aimed at students that want to be more than just IT users. It is aimed at those

that want to understand how computers work. The course will develop critical thinking,

analysis and problem-solving skills through the study of computer programming. Students

who love using computers, enjoy challenges, are problem solvers and like learning will all

thrive.