Qualification and Exam board: GCSE/OCR COMPUTER SCIENCE GCSE

INTENT

Computer Science is about understanding computer systems and networks at a deep level. Computers and the programs they run are among the most complex products ever created; designing and using them effectively presents immense challenges. Facing these challenges is our aim, we hope to prepare students for further education in specialized areas of computer science and to provide support for courses for students in engineering, mathematics and other fields requiring programming skills.

IMPLEMENTATION

Course content:

Unit 01 — Computer systems: Contains the body of knowledge about the theory of computer systems. Topics covered include: systems architecture, memory, storage, networks, system security, system software, ethical, legal, cultural and environmental concerns

Unit 02 — Computational thinking, algorithms and programming. Topics covered: Algorithms, programming techniques, producing robust programs, computational logic and data representation

Programming project — Consolidates the learning across the specification through a practical activity. Including: programming techniques, analysis, design, development, testing, evaluations and conclusions.

Assessment:

Units 01 and 02 are assessed via an exam at the end of Year 11, each paper is worth 50% of the overall grade. Currently, the course is 100% exam. OCR offer GCSE grades 9-1. For additional information about the course syllabus and specification please visit the OCR website

IMPACT

Students will be able to use the knowledge and skills they learn in the classroom on real-world problems. It is also a highly creative subject that calls on learners to be inventive. Students will gain valuable thinking and programming skills that are extremely attractive in the modern workplace.

Students will gain a deep understanding of problem solving and experience in creating logical and efficient solutions.

Students’ views:

“A brilliant decision for anyone looking to expand their knowledge of computing technology, whether it is programming or learning the fundamentals of computing, it is an enjoyable and interesting course.”

“ I’ve always been interested in computers and learning how to code. The Computing GCSE taught me so much and now I understand how computers work and the best bit is, I can actually code!”