Computing

Post 16

GCE Computer Science – OCR

At post 16 students study the OCR Computer Science course (course code H446), it is a natural progression for those who have studies GCSE Computing yet is designed in a way to make it accessible to those who have not.

The course is a two-year course with all examinations being sat at the end of the second year of study.

We undertake work so that at the end of year 13 the students will have:

- An understanding of and ability to apply the fundamental principles and concepts of computer science including; abstraction, decomposition, logic, algorithms and data representation
- The ability to analyse problems in computational terms through practical experience of solving such problems including writing programs to do so
- The capacity for thinking creatively, innovatively, analytically, logically and critically
- The capacity to see relationships between different aspects of computer science
- Mathematical skills
- The ability to articulate the individual (moral), social (ethical), legal and cultural opportunities and risks of digital technology

The subject has three main elements, two are examined by formal written exam and the third is a free choice project.

Paper one is on Computer Systems and tests traditional computing theory, this is worth 40% of the overall grade, it is 2 hours 30 min and is a written paper.

Paper two is on Algorithms and Programming and tests the pupil's ability to program, this is also worth 40% of the overall grade, it is 2 hours 30 min and is a written paper.

The free choice project is 20 % of the total marks, many pupils find this aspect very enjoyable.

Programming Languages

We mainly program with Visual Basic in Visual Studio a free and very powerful programming language that is used to produce very professional looking programs to work on Windows PCs.

In order to support the syllabus, we will also teach several other languages to a lesser extent, these include SQL, Python, Haskill, Prolog, HTML and Bash Scripting.

VLE – The Virtual Learning Environment

The course is fully supported with an in-depth VLE containing worksheets, all course notes, videos, examples and past exam paper

Links

GCE Computer Science - http://www.ocr.org.uk/qualifications/as-a-level-gce-computer- science-h046-h446-from-2015