

## **Is this subject right for me?**

Do you enjoy solving puzzles and problems?

Do you have the patience to work at a problem until you can solve it?

Do you like Maths?

Do you use your computer at home for more than just surfing the net?

The course is designed to appeal to students who are simply curious about the inner workings and applications of computers, as well as to those students who wish to pursue a career in Computing. The emphasis of the course is on the application of computers to solving realistic problems and hence should be of value and interest to most students. The course aims to develop an understanding of the main principles of solving problems using computers.

You will learn to program in a high level programming language (Visual Basic). In addition the course aims to help you understand the use of computers in commerce and industry and appreciate the impact of computers on individuals, business and society.

Computing at both AS and A Level will prepare you for an ever increasing number of courses in Higher Education including Computing, Software Engineering, Business and Computing or Computing Graphics. Computers are an integral part of most workplace situations and people with good computing skills are always in demand. Alternatively, some students go on to courses/jobs which are unrelated to Computing but the skills they have gained are increasingly used to cope with the latest technological advances.

## **What is the course content?**

Most students have never programmed a computer before so we teach you to program during the first term. To allow you maximum time to learn this new skill, you will always have individual access to a computer during practical lessons and the college provides 'open access' computers outside your lesson times. The college computers are all networked and you will have your own password protected network area.

The AS is a qualification in its own right and is worth 50% of the marks for A Level.

## **AS Level (Year 1)**

Module 1 covers computer fundamentals which includes networks, binary, hardware, and software. This module is 50% of the overall AS grade.

Module 2 covers programming techniques and logical methods and is also 50% of the overall AS grade

## **A Level (Year 2)**

Module 3 is advanced computing theory and includes further programming, networks and hardware. This module counts as 30% of the A level.

Module 4 is the computing project and will require you to produce a working system for a user. This module counts as 20% of the total A level.

## **How will your work be assessed?**

On the AS with two externally assessed written exams each lasting one and a half hours

On the A2 with a 2 hour exam and a practical project which will be assessed by your teacher and moderated by the exam board.

## **What are the entry requirements?**

The general entry requirements for studying at Advanced level apply, and must include a minimum of grade B in Maths GCSE. In addition, a minimum of grade C in English GCSE is preferred.

You will NOT be expected to have studied a Computing or ICT related course at GCSE in order to take the AS or the full A Level in Computing. What we look for is an interest in the subject and a willingness to learn. You should be prepared to work outside of lessons in order to practice the skills you have learnt in class.

## Other information

You will need to provide yourself with CDs or a USB memory stick to store Backup copies of your work.

You need to carefully consider the difference between Computing and ICT. They cover similar areas of study but have a different emphasis.

Computing is the more technically orientated of the two courses and should be chosen by anyone considering a career as a Software Engineer (programmer) or Systems Analyst. If you wish to learn how to write programs then you must choose to study Computing.

Students intending to study Computing at University are advised to consider studying Maths as AS Level.