Computer Science

Computing is of huge importance to the economy and it underpins Science and Engineering.

Computer Science will enable you to acquire and develop creative technical skills in order to develop computer programs to solve problems.

Choosing this course will give you valuable life skills such as; innovation, working collaboratively, independence, reasoning, logic and problem solving to name a few.

Topics Covered

In this course you have the opportunity to gain an understanding of how computers work and to create and troubleshoot computer programs for real-life purposes. The systems that will be developed will incorporate the sequencing of instructions, manipulating and processing of data and presenting results in an appropriate format.

You will also learn about the hardware, software, networking, and computer programming languages i.e. Python that underpins ICT systems.

Assessment

- J276/01 - Computer Systems: Written exam
- J276/02 - Computational thinking, algorithms & programming: Written exam
- J276/03 - Programming Project: 20 hour controlled assessment

This unit involves creating a solution to a problem in Python.

Course Progression

Pupils who choose to study this subject can go on to study either AS or A level Computer Science or BTEC IT; both of which are available at Swanshurst Sixth Form. These pathways offer highly demanding and exciting opportunities which would enable you to read computing, ICT or computer science further at degree level in university.

You could also choose to do an apprenticeship in IT/computing or study a more technical based qualification such as networking.

Career Opportunities

Computer Science develops valuable programming and thinking skills which are increasingly relevant to a wide variety of jobs.

Choosing to study this subject could lead to a career within the computer industry such as; technician, system developer, apps designer, computer gaming, programmer, computer analyst, software engineer, software tester, technician, network manager; the list is endless!