

IT allows greater opportunities for practical work than previous specifications

Practical work can be carried out using a wide range of software and hardware

IT allows for greater flexibility in modes of delivery

Students can be truly engaged in their studies by becoming active investigators rather than passive learners

There are greater opportunities than in previous specifications for effective personalised learning, for target setting and for differentiated outcomes

IT builds on, rather than replicates, students' functional ICT skills.

What will I do?

Year 7 & 8

Students will gain skills and knowledge of computing from identifying components of a computer, the software that is used and the input & output devices used.

Students will learn about Algorithms and Binary conversion before commencing onto creating an Interactive Product to advice students at Primary School about E-Safety.

The students will focus on the effects of social media and E-Safety along with hints and tips of how to stay safe online.

Students will start by covering basic programming concepts using the bbc micro: bit and further their skills by programming in Kodu game lab. The students will cover more complex programming concepts such as while loops, if statements, Boolean operators and lists using Python programming language. To succeed students will need to be able to use decomposition to break a problem down and create suitable solutions.

What will this course prepare me for?

The students will learn to analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs. Students will also be taught the components that make up digital systems, and how they communicate with one another and with other systems effectively.

The course is assessed by both exam and controlled assessment with the split being 80% exam and 20% controlled assessment. This course will appeal to students who are exceptional problem solvers and can think creatively, innovatively, analytically, logically and critically.

What will this course prepare me for?

On completion of this course students in ICT have a very valuable qualification that can form the basis for any degree in an ICT discipline. The numerical, analytical and problem-solving skills you develop in ICT are recognised as very useful for careers in Business and Computing. This course will appeal to students who are exceptional problem solvers and can think creatively, innovatively, analytically, logically and critically. Students must also be able to apply mathematical skills relevant to Computer Science to solve a wide range of complex problems.