



# Blue Coat Church of England Academy

**Year: 7**

**Subject: ICT/Computer Science**

## Overview

In an ever changing, technologically advancing society it is imperative that we equip our students with the desired skills needed for their future life and career. With new technological jobs emerging constantly that have not previously existed, it is vital that our students are digitally literate, logical and adaptable thinkers who have the knowledge and skills to meet the ever changing and new demands of the future society. The Royal Society has identified three distinct strands within computing that all complement each other – they are Computer Science, Information Technology and Digital Literacy. Each component is vital when preparing our students for their futures within the digital world.

The new Computer Science curriculum has been developed to equip young people in England with the foundational skills, knowledge and understanding of computing that they will need for the rest of their lives.

## Information Technology

In year 7 students develop their Information Technology skills, through a range of different projects, ensuring that they have the skills that they will need when using PowerPoints, excel spreadsheets and word processing packages. Students are taught the key aspects of these programs and how to develop them to meet the needs of their target audience.

We investigate internet safety and how students can make sure that they stay safe online by developing their own cartoon explaining the different dangers and how they can be avoided.

## **Computer Science**

The Computer Science skills are also developed through the programming of their own games using block programming techniques in Scratch. (<https://scratch.mit.edu/>). This enables the students to develop their programming skills, and their LORIC skills as they learn how to be resilient, using problem solving skills when debugging their own programs to ensure that they run as required.

Students participate in a cross curricular project learning how to program the BBC Microbit computer to time their Rocket Cars and download this information into spreadsheets so that they are able to analyse the results.

Students learn about how computers have developed throughout time and are encouraged to develop an understanding of how the computer works.