



# Blue Coat Church of England Academy

**Year: 9**

**Subject: Computing**

## 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.

## Computing Computer Science

Within Year 9 students continue to develop their skills through a range of different projects during the year.

1. The first project that students undertake in Year 9 is an **App Development** project where they learn the physical programming of an app game called Tappy Tap App. Students are introduced to the concept of event driven programming and applying this paradigm to the app. This is going to be essential in the options for GCSE subjects as students will gain a much deeper understanding of aspects of Computer Science thus will support their decision making process.
2. Students are immersed within the world of **Cyber Security** in their 2nd project of Year 9, for two reasons, one because it opens them to the world of work and opportunities within the subject of Computing and secondly because the internet is a huge part of everyone's lives and so knowing this is hugely important.
3. Students will undertake a Media project that looks at the creation of promotional materials that are created for a given purpose, this not only is a creative skill set,

but will allow student to see for themselves the knowledge and understanding of what the **Media** course has to offer. Again this will support decision making for students when it comes to making the right choices for themselves.

4. Students complete a 1 term project developing a range of skills that are an introduction to skills that will be essential at GCSE Computing and at building skills that provide students will a great overall for different aspects of Computing in general. This project will allow for students to get deeper into understanding of the world of Computing and offer an experience that focuses on applied learning, i.e., acquiring and applying knowledge, skills and understanding through purposeful tasks set in sector or subject contexts that have many of the characteristics of real work.
5. As above.
6. Finally in Year 9 students will get a chance to be futuristic and will delve into the world of **Artificial Intelligence**. Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Specific applications of AI include expert systems, natural language processing, speech recognition and machine vision.