



Key Stage 3 – Years 7&8

Computing

Year 7 Outline

In Year 7 our students start with the basics that help them throughout school. Logging into all of our systems, managing their file systems, emailing, and printing.

We then start looking at Hardware and Software, and how different devices interact with us and computers.

The language of computers is Binary, and Year 7s are guided through how computers communicate and how Binary is so important to all aspects of computing.

Students will learn how to use the Microsoft Office suite to manage and interpret data, create presentations and present those on a number of academic topics.

Then, we utilise a program from MIT and introduce the students to the world of programming. Scratch is the first step into coding and the students will be creating their own games to play!

Year 8 Outline

In Year 8 the students will learn about Cyber Crime and how to stop themselves from falling victim to the ever increasing threat. The students will also learn about social media, and digital wellbeing. Staying safe online no longer means just being aware of con artists after your money, as social media grows in our lives, it is even more important to know how to stay safe!

We also look at two Python modules, firstly using the ‘Turtle’ programme to become more familiar with sequencing, loops, and procedures, before eventually moving on to more traditional Python programming. Testing the students programming and their creativity to make a text-based adventure game!

As well as programming a game in Python, the students will spend time learning about the logic behind board games and many computer games. Eventually the students will spend time creating their own game, complete with its own rules and artwork.

Finally, the students will spend time revisiting the core components of computing – Hardware and Software. This is before they have an opportunity to create their very own mobile App. Using specialist software the students will be able to learn the intricacies of app creation, design, and programming.

Group/Class structure

The students in Years 7 and 8 will attend computing in their tutor groups. Collaboration is key in computing!

Teaching & Learning Style

St Bart's students are immersed in enthusiastic, high quality lessons from day 1. Computing is often cited as a student's favourite lesson. We aim to ensure all students can go into their final years at St Bart's equipped with the skills to thrive.

Assesment

Each topic is assessed by the teachers through a range of means. We operate a paperless course so there will be no lost sheets, no lost tests, and no scraps of paper floating around. Everything is online and always available wherever the students may be!

Opportunities beyond the classroom

Throughout the year students will have the opportunity to attend our Programming Club. This well attended club can extend the students Python skills and give them a further opportunity to show off what they have learnt in lesson, as well as at home!

We have previously entered teams into the CyberFirst competitions put on by the National Cyber Security Centre, as well as taking advantage of some of the resources put out by GCHQ, and the wider intelligence community.