



Subject: Computing

Year Group: 9

Curriculum Intent:

Develop learner's knowledge, skills and understanding through key computational concepts and experience. To ensure that all learners have sufficient knowledge to stay safe online and use computers safely in their lives. Develop resilient learners who are able to recover from mistakes and effectively solve problems. To give learners the opportunity to develop their capability, creativity and knowledge in computing and information technology.

College Values:

Within Computing we have high expectations that students display stewardship towards all resources provided. We develop students skills and capability to work collaboratively and show love and respect for one another.

Knowledge and Skills:

In year 9 students will develop their Computing knowledge and skills through a number of units. These include:

Python- In this unit students develop their knowledge of python programming and learn how to complete Binary conversion, use of While for Iteration, decomposition and functions, binary shifts to multiply, and concatenation to multiply.

Project management - In this unit students develop their knowledge and understanding of the project life cycle. Learning each phase and putting this into practice to complete a project.

Databases - In this unit students will develop their understanding of databases and develop their skills in being able to create queries single and multi table. How to create a user interface, as well as looking at how to protect data and how data can be used ethically.

Hardware and the CPU - In this unit students develop their knowledge of input, output and storage devices, as well as exploring concepts as the fetch execute cycle. Students will look at cloud storage and look at what does the future of processing potentially look like.

Programming - In this unit students will develop their knowledge on file processing and algorithms, where students will develop their understanding of the different types of algorithms such as bubble sort.

WWW, Protocols and E-safety - In this unit students will develop their knowledge and understanding of the history of the internet and the creation of the WWW. Will understand how to identify fake news and how to keep themselves safe and to be aware of identity theft.





Christ's College Guildford

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**Assessment:**

Students will be assessed during lessons both verbally and with the work they complete. More formal assessments will take place in the form of end of topic and term assessments.

Homework:

All Homework will be set via Google Classroom and Show My Homework.

Cultural Capital:

From the beginning we focus on ensuring our students are aware of the ethical, moral and legal issues relating to computer systems, business and digital design. As well as being regularly reminded of the personal safety issues whilst using the internet and all types of technology.

A solid understanding of how technology affects the real world is vital for students to be able to succeed once they leave us.