

Sackville School Computer Science Curriculum - Year 7



TERM	WHAT? (Is delivered?)	WHY? (Is this important?)	WHY NOW? (Why is this taught now?)	IMPACT? (What is the impact at the end of this half term?)	ASSESSMENT
Aut 1	Technology in our lives looking exploratively at the technology students use day to day	<ul style="list-style-type: none"> Introduces students to effective online searching and questioning of information validity Encourages the use of keyboards and mice to build dexterity and competence Evaluates their proficiency with software skills commonly used Understand the need for clear folder structures; 	<ul style="list-style-type: none"> It is vital that all students positioning is assessed upon entry to the school Identifies cohort wide areas of weakness after progression from primary school Understanding software selection is pivotal to the rest of their school life Introduces students to genre conventions, preparing them for future KS3 units 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Save their work in an appropriate place Understand the key functions of the software they use regularly and use this to effectively select software for a given purpose Develop an understanding of 'good' online searches and how to validate information online. 	Baseline assessment on content from the Key Stage 2 National Curriculum.
Aut 2	Computer Hardware and History – Searching the Internet	<ul style="list-style-type: none"> Understanding the internal components of a PC and their function in the operation of a device Be able to identify core components of a computer device To be able to analytically research using the internet. 	<ul style="list-style-type: none"> To be able to identify hardware within a device as they start the spiral model of computer hardware throughout the key stages. To understand how computer devices function To be able to discuss the evolution of technology through the last 80 years 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Develop an understanding of 'good' online searches and how to validate information online. Demonstrate their understanding in a discussion Identify computer hardware by name and appearance 	Assessment online through educake in week 5/6
Spr 1	System Threats and System Security	In a ever developing digital world and awareness of digital security and how prevention of attacks couldn't be more relevant. As shopping, education and banking move more online, building a skill set to spot and prevent attacks early on is vital.	<ul style="list-style-type: none"> The world of cyber security is changing and with the NCCC stating that this will be the biggest sector for jobs by 2026. Be able to advise about how to avoid cyber security threats and understand their implications. Explain how to mitigate cyber security attacks 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Understand the term 'system threats' Can state the different types of threats in the teaching content Can explain the threats and their impacts Can explain the term social engineering and give examples Can suggest prevention methods for more than three examples 	Google Form Assessment
Spr 2	Presenting Information – Images and Video	Building students' awareness of digital editing helps build a better self-image. This unit focuses on different digital mediums used to present information and the impact of each. The unit particularly focuses on marketing campaigns and branding.	<ul style="list-style-type: none"> An introduction to media and media content. Video manipulation and editing is prevalent in the mainstream media understanding its use and how to check validity is important Marketing and media is one of the largest sectors in IT 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Understand that different presentation methods are used for different types of information. Understand key terms. Understand how sound and images are represented within the computer To be able to discuss image editing. 	Google Form Assessment

Sum 1	Edublocks	Students have been introduced to coding and possibly scratch at primary school. However, with varying depths of knowledge, exposure, and inaccurate use of key terms many misconceptions may have formed. This unit creates a foundation for further coding/algorithmic based learning.	<ul style="list-style-type: none"> • Allows for assessment of prior attained knowledge • Scaffolds learners nicely from block based coding to textual syntax • Allows for mistakes and advises the user to build confidence and resilience 	Students will be able to: <ul style="list-style-type: none"> • Understand the four strands of computational thinking • Understand that there are two forms of iteration • Understand how selection can create pathways through a program 	Finished executable coded programs
Sum 2	eSafety	Students are coming toward the end of their first year at Sackville and will have experienced a wide spread of technology. eSafety allows for us to teach about the use of technology for radicalisation, sexual messaging and online bullying.	As students mature and their exposure to a wider range of threats/dangers emerges, it's important to establish signposts for such dangers and what actions can be taken.	Students will be able to: <ul style="list-style-type: none"> • Understand how to use the internet safely, responsibly, and respectfully. • Are aware of methods to access help where/when needed. • Understand how to protect their online identity. • Can use and access core school systems • Can define the terms radicalisation and sexting • Can discuss the ethical and moral impacts of IT 	Assessment on educate

Links to L4L Curriculum and Gatsby Benchmarks:

- L4L Online Safety
- 2 - Learning from career and labor market information
- 5 - Linking curriculum learning to careers
- 5 - Encounters with employers and employees
- 8 - Personal Guidance