Sackville School Computer Science Curriculum - Year 8



| 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 | Beyond the museum — Communication methods | Alan Turing famously said that 'if we don't know where we have come from with technology, we certainly can't know where we are going'. This premise is the foundation of this unit. Students explore the world that has gone before us within our young subject. Looking at the Information Age and piecing together the History of Computing. | Focuses on research skills and online searching skills Builds skills with keyboard and mouse Allows for appropriate software selection with an understanding of what the features in each software are | Students will be able to: Be able to explain the 6 different communication networks Understand that location can impact the communication of people Be able to explain the chronology of The Information Age Understand how different milestones must lead to today's communication methods | Portfolio Completion |
| Aut 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. | 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 | Students will be able to: 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. | Portfolio Completion |
| Spr 1 | Web Creation (HTML) | Web usage has increased dramatically over the last 7 years. An understanding about HTML is vital in today climate. Students in Key Stage 4 and 5 Cp also are required to know HTML constructs for their exams. | Exposure to different design constructs and pedagogy Use of HTML code to develop a website Links to Autumn 2 learning where students can embed their marketing materials into a real life product | Students will be able to: Understand the term web design. Be able to create a wireframe that has a likeness to the product. Be able to create a site map. Be able to build an easily navigable website. | Final Product Assessment |
| Spring 2 | Online Safety | 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: 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 define the terms radicalisation and sexting Can discuss the ethical and moral impacts of IT | Portfolio Completion |

| Sum 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. | 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 | Students will be able to: 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 | Portfolio Completion |
|-------|---------------------------------------|--|--|--|----------------------|
| Sum 2 | Under the Hood | Students need to understand the components of a computer system. Their characteristics and purpose and allowing the system to function. In this unit students will investigate their own devices and their link to others. | With many students using a select few handheld devices, they often dont understand the internal components of a computer or how their devices work. | Students will be able to identify the different components of a computer Students can explain how different devices and their characteristics can impact the functionality and speed of a machine. Students can make links between devices. | Portfolio Completion |

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