



### **What is Parkside aiming to achieve through its Computer Science curriculum?**

Students live in a digital age; their work environments and lives are ever adapting and technology plays a bigger role than ever. The role of the computing curriculum is to equip students with computational thinking skills and understanding of the digital age so that they can better understand and live in a digital world.

Computing ensures that students are digitally literate and able to express themselves digitally. This is important as it prepares them for a job market where computational thinking skills are in demand.

Not all students will study Computer Science at KS4 so it is essential that students gain a broad set of skills and an awareness of the subject and its impact on the modern world. Part of this involves developing students' problem-solving abilities, which are transferable skills and impact a variety of other STEM subjects.

GCSE Computer Science and Cambridge Technical IT are further options at Key Stage Four and Five, respectively, which will allow learners to continue to develop key knowledge and skills, exploring a range of topics and preparing for future progression in this area.

# Parkside School Subject Curriculum Plan

## Subject: Computer Science – KS3



PARKSIDE  
SCHOOL

Year	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
7	<b>Introduction</b>	<b>Online Safety</b>	<b>Computational Thinking</b>	<b>Data Representation</b>	<b>Computer Systems</b>	<b>Visual Programming</b>
	Quality Audience Using the Network Username & Passwords Acceptable Use Microsoft Teams/SharePoint IDEA (Enrichment) Email Beginner <i>inc.</i> Attachment	SMART CEOP/Thinkuknow Profile & Privacy Digital Footprint URL: Fake or Fact Bias, Reliability & Validity	Decomposition Pattern recognition Abstraction Algorithms Challenge: Evaluation	Modelling Spreadsheets Purpose Features Formula & Functions Challenge: Charts & Graphs	What is a computer system? Hardware ( <i>Software</i> ) IPOS Secondary Storage Peripherals (including use for disabled community) Challenge: Sensors	Logical Reasoning Sequence Iteration Conditional Statements Threads
8	<b>1a Introduction</b>	<b>Online Safety</b>	<b>Data Representation &amp; Graphics</b>		<b>Data Representation</b>	<b>Textual Programming</b>
	Quality Audience <b>Review</b> Passwords, Acceptable Use, Teams/SharePoint/Email IDEA (Enrichment)	MOMO Challenge Screen Time Social Media Cyberbullying Self Esteem Smartphone Addiction	Bitmap & Vector Graphics Resolution Lossy Vs Lossless File Formats ASCII	BMP:PNG:GIF Canvas Properties Tools	Algorithms Flowchart Boolean Binary Cryptography / Caesar Cypher	Logical Reasoning Sequence Iteration Conditional Statements Threads
	<b>1b Computer Components</b>					
	Computer Components CPU - Fetch/Execute Cycle Memory & Storage Secondary Storage Embedded Computer Systems					
9	<b>1a Introduction</b>	<b>Online Safety</b>	<b>Pre-Production</b>	<b>Graphics</b>	<b>HTML Programming</b>	<b>Internet &amp; Ethics</b>
	Quality Audience <b>Review</b> Passwords, Acceptable Use, Teams/SharePoint/Email IDEA (Enrichment)	Digital Citizenship Selfies Trolling Online Shaming Grooming Sexting Radicalisation	Visualisation diagram Mood board Mind Map Logo Client Brief Scenario	Canvas Properties Tools Photoshop skills Basic and Advanced	Notepad HTML Tags Body/Head External Links Background Images Audio	IoT Embedded Systems Internet & www Search Engines Websites National & Global Ethics Data Misuse Act Copyright Patents Act
	<b>1b Cyber Crime</b>					
	Cyber Crime Virus and Malware Dark Web Phishing					