



“To equip our students with the knowledge to be skilled consumers and expert creators in our digital, connected world.”

	Foci	Assessment	Knowledge Organiser
Unit 1	Hardware <ul style="list-style-type: none"> • Components • CPU structure • CPU performance • Memory and virtual memory 	Be able to describe the purpose of components. Describe how different factors affect CPU performance. Topic test.	Included in unit booklet
Unit 2	Algorithms and coding <ul style="list-style-type: none"> • Accurate algorithms • Flowcharts • Pseudocode • Coding with Python. • Graphical coding with 'turtle' • Explore standard algorithms for searching and sorting 	Create algorithms using Flowol. Learn the fundamentals of sequence, selection and iteration in Python. Use the Turtle library to create graphical programs. Sort sample data sets using bubble sort and merge sort. Topic test.	Included in unit booklet
Unit 3	Networks and the Internet <ul style="list-style-type: none"> • LAN and WAN • The internet – packets and routers • Protocols • Threats to networks • Encryption and security 	Be able to explain the difference between the internet and the www. Define a protocol and explain examples. Compare symmetric and asymmetric encryption	Included in unit booklet
Unit 4	E-Safety <ul style="list-style-type: none"> • The dangers of the online world. • Social media and gaming. • Social interactions online and the law. 	Case study of online abuse. Understanding issues around gaming as well as social media. Describe how different laws protect us or restrict us in different ways. Topic test.	Included in unit booklet
Unit 5	Internet and IT life skills <ul style="list-style-type: none"> • Online search skills • Excel power user • Word and Powerpoint. 	IT skills to support study in all subjects at key stage 4 and beyond. Learn smart searching of the internet to find exactly what you want. Use Excel to plan costs and tasks. Topic test.	Included in unit booklet