

SUBJECT | CURRICULUM SUMMARY | YEAR 7

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPICS	<p>SoL – e-Safety, respectful use of online resources</p> <p>Understanding of how to interact safely with online communities that are age appropriate.</p>	<p>SoL – First Steps in Small Basic</p> <p>Text-based programming – skills include logic, algorithmic thinking, and decomposition.</p>	<p>SoL – Sound manipulation in Audacity – Advertisement</p> <p>Understand how data is stored and represented in digital form.</p>	<p>SoL – AI and Machine Learning</p> <p>Understand the possibilities and ethical considerations of AI and Machine Learning.</p>	<p>SoL – Intro to Kodo</p> <p>Block-based programming – skills include logic, algorithmic thinking, and decomposition.</p>	<p>SoL – Microbits (Using technology to solve problems – linked to Health)</p> <p>Links with healthy living, using tech to assist life, and developing routines for an active life.</p>
HOME LEARNING	iDEA Badges linked to content	iDEA Badges linked to content	iDEA Badges linked to content	iDEA Badges linked to content	iDEA Badges linked to content	iDEA Badges linked to content
ASSESSMENT	MCQ assessment	Programming Portfolio and self-assessment	Project portfolio and self-assessment including evidence or planning	Project portfolio and self-assessment including evidence and planning	Kodo creation portfolio that includes self-assessment	Prototype Presentation

SUBJECT | CURRICULUM SUMMARY | YEAR 8

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPICS	SoL – Unit 1 PG Cyber Crime and Security Knowledge of online scams, and threats. Appreciation of ethical and safe conduct when interacting with online communities.	SoL – Modelling with Small Basic Text-based programming – skills include logic, algorithmic thinking, and decomposition.	SoL – PG Understanding Computers Hardware, Binary, and Storage. There will be an understanding of how each	SoL – PG Intro to Python Variables, Selection, Searching, and loops.	SoL – AI and Machine Learning Understand the possibilities and ethical considerations of AI and Machine Learning.	SoL – AppShed App Development Project design and repurposing digital artefacts for a stated purpose, audience, and usability considered.
HOME LEARNING	iDEA Badges link to content	iDEA Badges link to content	iDEA Badges link to content	iDEA Badges link to content	iDEA Badges link to content	iDEA Badges link to content
ASSESSMENT	MCQ assessment	Programming Portfolio and self-assessment	MCQ assessment	Programming portfolio / Educake Questions	Project portfolio and self-assessment including evidence and planning	App publication and self-assessment

SUBJECT | CURRICULUM SUMMARY | YEAR 9

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPICS	System Architecture <ul style="list-style-type: none"> - F-D-E Cycle - CPU Components - Architecture - Clock Speed - Cache Size - Cores 	Memory and Storage <ul style="list-style-type: none"> - RAM and ROM - Secondary Storage - Number bases - Character sets - Images - Sound 	Computer Networks <ul style="list-style-type: none"> - LAN / WAN - Wireless - Wired - Routers - Switches - Hosting - Cloud - Transmission media - Topologies - Protocols 	Network Security <ul style="list-style-type: none"> - Form of Attacks - Vulnerabilities of systems and the prevention methods. - Encryption 	System Security <ul style="list-style-type: none"> - Operating systems - Memory management - Peripheral management - Users - Files - Utility software 	Ethical, Legal and Culture <ul style="list-style-type: none"> - Ethical issues - Environmental issues - Privacy issues - Legislation - Software licences
HOME LEARNING	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize
ASSESSMENT	End of topic assessment via Educake or Exam questions	End of topic assessment via Educake or Exam questions	End of topic assessment via Educake or Exam questions	End of topic assessment via Educake or Exam questions	End of topic assessment via Educake or Exam questions	End of topic assessment via Educake or Exam questions

SUBJECT | CURRICULUM SUMMARY | YEAR 10

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPICS	Algorithm <ul style="list-style-type: none"> - Abstraction - Decomposition - Inputs and processes - Flowcharts - Trace Tables - Sorting - Searching 	Programming Fundamentals <ul style="list-style-type: none"> - Variables - Sequence - Selection - Iteration - Arithmetic operators - Boolean - Data types 	Robust Programs <ul style="list-style-type: none"> - Misuse - Authentication - Validation - Naming conventions - Commenting - Maintainability - Commenting - Indentation - Testing - Test Data 	Boolean Logic <ul style="list-style-type: none"> - Logic diagrams - Boolean Operators - AND - NOT - OR - Truth Tables 	Language and IDE <ul style="list-style-type: none"> - High level languages - Low level languages - Translators - Compilers - Interpreter - Error diagnostics 	Python Programming Project Testing Investigation Making Evaluating
HOME LEARNING	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize	A weekly task linked to the lesson contact via Seneca and/or BBC Bitesize
ASSESSMENT	End of topic assessment via Educake or Exam questions.	End of topic assessment via Educake or Exam questions.	End of topic assessment via Educake or Exam questions.	End of topic assessment via Educake or Exam questions.	End of topic assessment via Educake or Exam questions.	End of topic assessment via Educake or Exam questions.

SUBJECT | CURRICULUM SUMMARY | YEAR 11

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPICS	Python Programming Techniques	Paper 1 Retrieval Tasks	Paper 2 Retrieval Tasks	Exam technique and	Booster Sessions to support exam season	
HOME LEARNING	Weekly tasks are linked to retrieval exercises to Paper 1 topics	Weekly tasks are linked to retrieval exercises to Paper 1 topics	Weekly tasks are linked to retrieval exercises to Paper 2 topics	Weekly tasks are linked to retrieval exercises to Paper 1 and 2 topics		
ASSESSMENT	Students use their programming skills to answer Paper 2 algorithm questions	Students use their programming skills to answer Paper 2 algorithm questions	Students use their programming skills to answer Paper 1 algorithm questions	Students use their programming skills to answer Paper 1 algorithm questions		