

Year 1-6 Computing Progression Document

National Curriculum	
KS1	KS2
CS1/1.1 Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. CS1/1.2 Create and debug simple programs. CS1/1.3 Use logical reasoning to predict the behaviour of simple programs. IT1/1.4 Use technology purposefully to create, organise, store, manipulate and retrieve digital content DL1/1.5 Recognise common uses of information technology beyond school. DL1/1.6 Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.	CS2/1.1 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. CS2/1.2 Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. CS2/1.3 Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. CS2/1.4 Understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration. CS2/1.5 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. IT2/1.6 Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. DL2/1.7 Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Key

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	CS -How computers and computer systems work & how they are designed and programmed IT -The purposeful use of existing programs to develop products and solutions DL - The skills, knowledge and understanding needed in order to participate fully and safely in an increasingly digital world.
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Computing Overview

Core disciplines:

Computer Science	Information Technology	Digital Literacy
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Online safety Taught the first lesson of each half term in each year group	Online Safety – Self-image and identity	Online Safety – Online Relationships	Online Safety – Online Reputation	Online Safety – Managing Online Information	Online Safety – Privacy and Security	Online Safety – Copyright and Ownership
	Computing Systems and networks	Creating Media	Programming A	Data and Information	Creating Media	Programming B
Year 1	Technology around us.	Digital painting.	Moving a robot.	Grouping data.	Digital writing.	Programming animations.
Year 2	Information technology around us	Digital photography	Robot algorithms	Pictograms	Digital music	Programming quizzes
Year 3	Connecting computers.	Stop-frame animation	Sequencing sounds	Branching databases	Desktop publishing	Events and actions in programs
Year 4	The internet	Audio production	Repetition in shapes	Data logging	Photo editing	Repetition in games

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Year 5	<u>Systems and searching</u>	<u>Video production</u>	<u>Selection in physical computing</u>	<u>Flat-file databases</u>	<u>Introduction to vector graphics</u>	<u>Selection in quizzes</u>	
Year 6	<u>Communication and collaboration</u>	<u>Webpage creation</u>	<u>Variables in games</u>	<u>Introduction to spreadsheets</u>	<u>3D modelling</u>	<u>Sensing movement</u>	