



Computing Curriculum Statement

“Computing is not about computers any more. It is about living.” Nicholas Negroponte.

Policy reviewed by: Thanjila Khanom

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Computing will provide children with a deeper understanding of how computer work and operate and will give children greater confidence in building life-long computer skills.

There are three core strands to the curriculum:

- Computer Science:**
 The principles of information and computation, how digital systems work and how to put this knowledge to use through programming.
- Information Technology:**
 How to create programs, systems and a range of content.
- Digital Literacy:**
 Children are able to express themselves and develop their ideas through information and communication technology.

The new curriculum will provide the skills for children to solve problems, design systems and understand the power and limits of human and machine intelligence.

Children who can think computationally are better able to conceptualise, understand and use computer-based technology, and so are better prepared for today’s world and the future.

Program of Study

Core Strands	KS1	KS2
Computer Science	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and clear instructions. Create and debug simple programs Use logical reasoning to predict the behaviour of simple	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

	<p>programs.</p>	<p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web</p> <p>Appreciate how search results are selected and ranked.</p>
Information Technology	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Use search technologies effectively</p> <p>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</p>
Digital Literacy	<p>Recognise common uses of information technology beyond school.</p> <p>Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p>	<p>Understand the opportunities networks offer for communication and collaboration.</p> <p>Be discerning in evaluating digital content.</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>