



Computing Curriculum Map – Skills Progression 2023-2024



“Whether you want to uncover the secrets of the universe, or you want to pursue a career in the 21st Century, basic computer programming is an essential skill to learn”

Prof. Stephen Hawking

	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
YEAR 1	<p><u>Online Safety/Exploring Purple Mash</u></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. (DL)</p> <p><u>Grouping and Sorting</u></p> <p>-Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS)</p>	<p><u>Pictograms</u></p> <p>-Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)</p> <p><u>Lego Builders</u></p> <p>-Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS)</p>	<p><u>Maze Explorers</u></p> <p>-Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS)</p> <p>-Create and debug simple programs. (CS)</p> <p>-Use logical reasoning to predict the behaviour of simple programs. (CS)</p>	<p><u>Animated Story Books</u></p> <p>-Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)</p>	<p><u>Coding</u></p> <p>-Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS)</p> <p>-Create and debug simple programs. (CS)</p> <p>-Use logical reasoning to predict the behaviour of simple programs. (CS)</p> <p>-Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)</p>	<p><u>Spreadsheets</u></p> <p>-Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)</p> <p><u>Technology Outside School</u></p> <p>-Recognise common uses of information technology beyond school. (DL)</p>

	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
YAER 2	<u>Coding</u> -Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS) -Create and debug simple programs. (CS) -Use logical reasoning to predict the behaviour of simple programs. (CS)	<u>Online Safety</u> -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. (DL) <u>Spreadsheets</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)	<u>Questioning</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)	<u>Effective Searching</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT) -Recognise common uses of information technology beyond school. (DL)	<u>Creating Pictures</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)	<u>Making Music</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT) <u>Presenting Ideas</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)

	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
YEAR 3	<p><u>Coding</u></p> <p>-Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS)</p> <p>-Use sequence, selection and repetition in programs; work with variables and various forms of input and output. (CS)</p> <p>-Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (CS)</p>	<p><u>Online Safety</u></p> <p>-Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (DL)</p> <p><u>Spreadsheets</u></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. (IT)</p>	<p><u>Touch Typing</u></p>	<p><u>Email</u></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. (IT)</p> <p>-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. (CS)</p> <p>-Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (DL)</p>	<p><u>Branching Databases</u></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. (IT)</p> <p><u>Simulations</u></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. (IT)</p>	<p><u>Graphing</u></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. (IT)</p> <p><u>Presenting</u></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. (IT)</p>

	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
YEAR 4	<u>Coding</u> -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS) -Use sequence, selection and repetition in programs; work with variables and various forms of input and output. (CS) -Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (CS) -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. (IT)	<u>Online Safety</u> -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. (CS) -Use technology safely, respectfully; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (DL) <u>Making Music</u> -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. (IT)	<u>Spreadsheets</u> -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. (IT)	<u>Writing for Different Audiences</u> -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. (IT)	<u>Logo</u> -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS) -Use sequence, selection and repetition in programs; work with variables and various forms of input and output. (CS) -Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (CS) <u>Animation</u> -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. (IT)	<u>Effective Search</u> -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. (CS) -Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. (IT) <u>Hardware Investigators</u> -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. (CS)

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YAER 5	<u>Coding</u> -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS) -Use sequence, selection and repetition in programs; work with variables and various forms of input and output. (CS) -Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (CS) -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. (IT)	<u>Online Safety</u> -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. (CS) -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (DL) <u>Spreadsheets</u> -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. (IT)	<u>Databases</u> -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. (IT)	<u>Game Creator</u> -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS) -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. (IT)	<u>3D Modelling</u> -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. (IT) <u>Concept Maps</u> -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. (IT)	<u>Word Processing</u> -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. (IT)

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YEAR 6	<p><u>Coding</u></p> <p>-Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS)</p> <p>-Use sequence, selection and repetition in programs; work with variables and various forms of input and output. (CS)</p> <p>-Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (CS)</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. (IT)</p>	<p><u>Online Safety</u></p> <p>-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. (CS)</p> <p>-Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. (IT)</p> <p>-Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (DL)</p> <p><u>Understanding Binary</u></p>	<p><u>Spreadsheets</u></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. (IT)</p> <p>-Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS)</p>	<p><u>Blogging</u></p> <p>-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. (CS)</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. (IT)</p> <p>-Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (DL)</p>	<p><u>Text Adventures</u></p> <p>-Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. (CS)</p> <p>-Use sequence, selection and repetition in programs; work with variables and various forms of input and output. (CS)</p> <p>-Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (CS)</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. (IT)</p>	<p><u>Networks</u></p> <p>-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. (CS)</p> <p><u>Quizzing</u></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. (IT)</p>