



# Hutton Rudby Primary School

## Computing Progression Statements

### Computing Intent Statement:

At Hutton Rudby Primary School we keep the CHILD at the heart of everything we do, as we provide an education which will enable them to be lifelong learners.

We will “prepare our children for life in the big wide world” by giving them the knowledge and skills to:

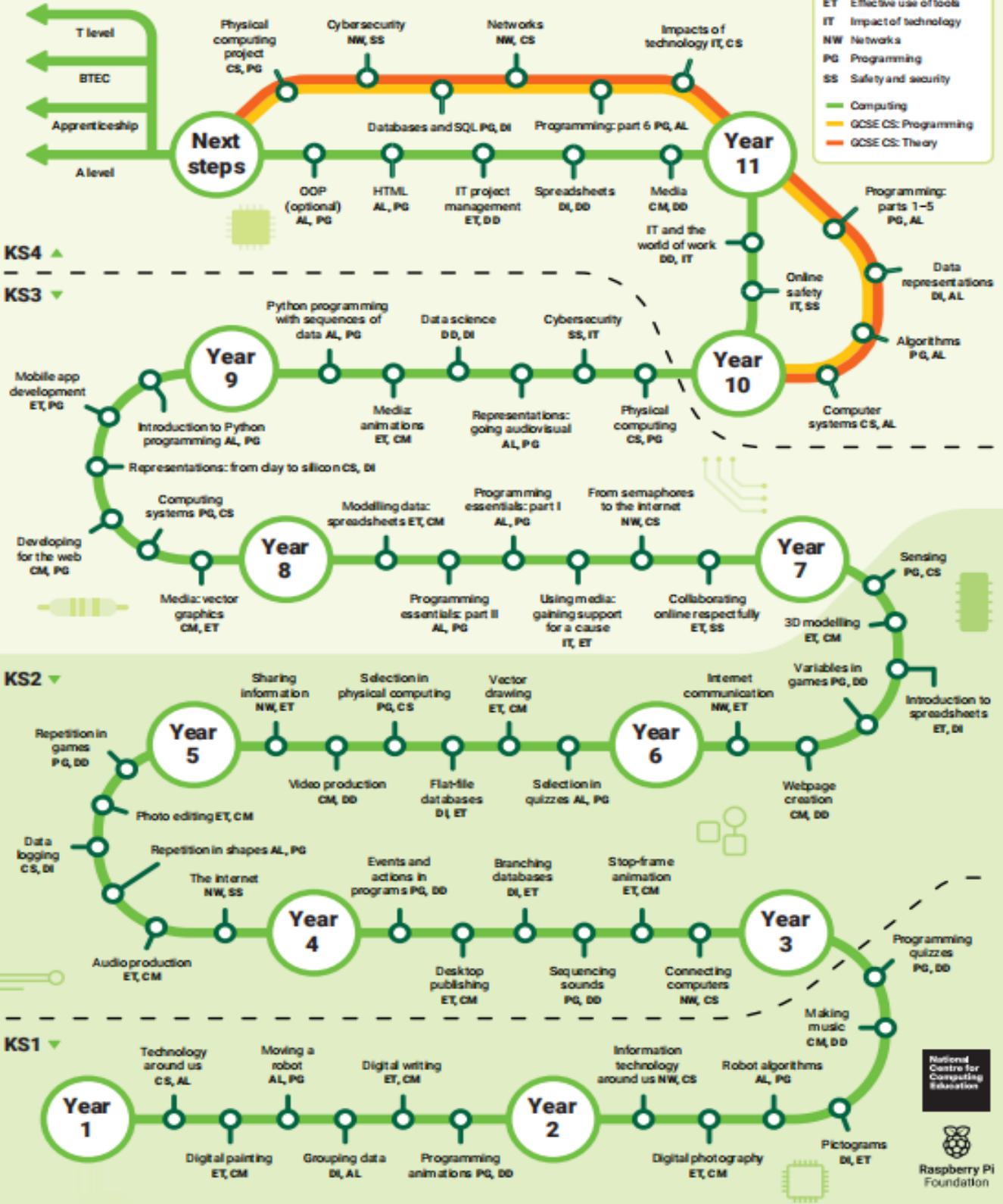
- Algorithms — Be able to comprehend, design, create, and evaluate algorithms
- Computer networks — Understand how networks can be used to retrieve and share information, and how they come with associated risks
- Computer systems — Understand what a computer is, and how its constituent parts function together as a whole
- Creating media — Select and create a range of media including text, images, sounds, and video
- Data and information — Understand how data is stored, organised, and used to represent real-world artefacts and scenarios
- Design and development — Understand the activities involved in planning, creating, and evaluating computing artefacts
- Effective use of tools — Use software tools to support computing work
- Impact of technology — Understand how individuals, systems, and society interact with computer systems
- Programming — Create software to allow computers to solve problems
- Safety and security — Understand risks when using technology, and how to protect individuals and systems



# Teach Computing Curriculum Journey

Download the curriculum resources: [nccpe.io/get\\_tcc](https://nccpe.io/get_tcc)

Key	
AL	Algorithms
CS	Computing systems
CM	Creating media
DI	Data and information
DD	Design and development
ET	Effective use of tools
IT	Impact of technology
NW	Networks
PG	Programming
SS	Safety and security
Computing GCSE CS: Programming GCSE CS: Theory	



National Centre for Computing Education



## Year 1 Computing Progression Statements

<b>Algorithms</b>	<ul style="list-style-type: none"> <li>● Recognise common uses of information technology beyond school</li> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● 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.</li> <li>● Use technology safely and respectfully</li> <li>● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>● Create and debug simple programs</li> <li>● Use logical reasoning to predict the behaviour of simple programs</li> <li>● Recognise common uses of information technology beyond school</li> </ul>
<b>Computing Systems</b>	<ul style="list-style-type: none"> <li>● Recognise common uses of information technology beyond school</li> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● 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.</li> </ul>
<b>Data and Information</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Use technology safely and respectfully</li> </ul>
<b>Design and Development</b>	<ul style="list-style-type: none"> <li>● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>● Create and debug simple programs</li> <li>● Use logical reasoning to predict the behaviour of simple programs</li> </ul>
<b>Effective Use of Tools</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Use technology safely and respectfully, keeping personal information private</li> </ul>
<b>Programming</b>	<ul style="list-style-type: none"> <li>● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>● Create and debug simple programs</li> <li>● Use logical reasoning to predict the behaviour of simple programs</li> <li>● Recognise common uses of information technology beyond school</li> </ul>
<b>Creating Media</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Use technology safely and respectfully, keeping personal information private</li> </ul>

## Year 2 Computing Progression Statements

<b>Algorithms</b>	<ul style="list-style-type: none"> <li>● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>● Create and debug simple programs</li> <li>● Use logical reasoning to predict the behaviour of simple programs</li> </ul>
<b>Computing Systems</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Recognise common uses of information technology beyond school</li> <li>● 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</li> </ul>
<b>Data and Information</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>● 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</li> </ul>
<b>Design and Development</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>● Create and debug simple programs</li> <li>● Use logical reasoning to predict the behaviour of simple programs</li> </ul>
<b>Effective Use of Tools</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Recognise common uses of information technology beyond school</li> <li>● 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</li> </ul>
<b>Networks</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Recognise common uses of information technology beyond school</li> <li>● 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</li> </ul>
<b>Programming</b>	<ul style="list-style-type: none"> <li>● Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>● Create and debug simple programs</li> <li>● Use logical reasoning to predict the behaviour of simple programs</li> <li>● Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> </ul>
<b>Creating Media</b>	<ul style="list-style-type: none"> <li>● Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> <li>● Recognise common uses of information technology beyond school</li> <li>● 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</li> </ul>

## Year 3 Computing Progression Statements

<b>Computing Systems</b>	<ul style="list-style-type: none"> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● 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</li> <li>● 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</li> </ul>
<b>Data and Information</b>	<ul style="list-style-type: none"> <li>● 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</li> <li>● use technology safely, respectfully and responsibly</li> </ul>
<b>Design and Development</b>	<ul style="list-style-type: none"> <li>● Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs</li> <li>● 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</li> </ul>
<b>Effective Use of Tools</b>	<ul style="list-style-type: none"> <li>● Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>● 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</li> <li>● Use technology safely, respectfully and responsibly</li> </ul>
<b>Networks</b>	<ul style="list-style-type: none"> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● 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</li> <li>● 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</li> </ul>
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<b>Creating Media</b>	<ul style="list-style-type: none"> <li>● Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>● 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</li> </ul>

### Year 4 Computing Progression Statements

<b>Algorithms</b>	<ul style="list-style-type: none"> <li>● Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>● 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</li> </ul>
<b>Computing Systems</b>	<ul style="list-style-type: none"> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● 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</li> </ul>
<b>Data and Information</b>	<ul style="list-style-type: none"> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● 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</li> </ul>
<b>Design and Development</b>	<ul style="list-style-type: none"> <li>● Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs</li> <li>● Select, use and combine a variety of software (including internet services) on a range of</li> </ul>

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<p><b>Effective Use of Tools</b></p>	<ul style="list-style-type: none"> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>● 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</li> <li>● Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>
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<p><b>Safety and Security</b></p>	<ul style="list-style-type: none"> <li>● 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</li> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>● 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</li> <li>● Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li> </ul>

<b>Creating Media</b>	<ul style="list-style-type: none"> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>● 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</li> <li>● Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>
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<b>Algorithms</b>	<ul style="list-style-type: none"> <li>● Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>● 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</li> </ul>
<b>Computing Systems</b>	<ul style="list-style-type: none"> <li>● Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>● Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>● Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>● 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</li> </ul>
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<b>Design and Development</b>	<ul style="list-style-type: none"> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>● 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</li> <li>● Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>
<b>Effective Use of Tools</b>	<ul style="list-style-type: none"> <li>● 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</li> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>● 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.</li> </ul>
<b>Networks</b>	<ul style="list-style-type: none"> <li>● 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</li> <li>● Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> </ul>
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