

# Computer Science

## Curriculum & Rubric Map Overview

2025-2026

Year 7



The table below details the skills and knowledge students will be covering each half term in Computer Science.

Time frames for when students will complete their Interim and Masters Assessments have also been given. Both assessments will aim to assess the knowledge and skills a student has covered up to that point in their education, this also includes the curriculum covered in the previous year/s.

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge and skills that will be covered during this half term.	<u>CS00 Introduction to Computing</u>  Introduction to the digital classroom.  <ul style="list-style-type: none"> <li>• Expectations and routines</li> <li>• File management and security</li> <li>• e-safety issues and security</li> <li>• Digital literacy in Microsoft 365</li> </ul>	<u>CS01 Email and E-Safety</u>  Introduction to the digital communication, and E-Safety.  <ul style="list-style-type: none"> <li>• Sending and receiving emails</li> <li>• Netiquette</li> <li>• Sending attachments</li> <li>• Dealing with E-Safety issues</li> <li>• Providing advice to new users</li> </ul>	<u>CS06 Computer Systems</u>  This unit provides the essential knowledge of computer systems and how they work which is fundamental to the subject.  <ul style="list-style-type: none"> <li>• Types of computer systems</li> <li>• and peripherals</li> <li>• The CPU</li> <li>• RAM &amp; ROM</li> <li>Secondary storage</li> </ul>	<u>CO08 Spreadsheets</u>  The unit is centered around introducing students to using tools to manage and manipulate data.  <ul style="list-style-type: none"> <li>• Using spreadsheets effectively</li> <li>• Formulas and functions</li> <li>• Conditional formatting</li> <li>Using graphs and charts effectively in spreadsheets</li> </ul>	<u>CS12 Publishing</u>  This unit focus on producing work for an audience and meeting deadlines. Pupils carry out different roles within the publishing process to create a digital document.  <ul style="list-style-type: none"> <li>• House style</li> <li>• Design</li> <li>• Reporter</li> <li>• Editor</li> <li>• Designer</li> </ul>	<u>CS18 Introduction to problem solving</u>  This unit focuses on the three core programming constructs whilst developing computational thinking skills through problem solving within a block-based programming environment.  <ul style="list-style-type: none"> <li>• Sequencing</li> <li>• Selection</li> <li>• Iteration</li> </ul>
	<b>Assessments</b> End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Interim assessment 1</b> To cover CS00 and CS01 60 minutes	End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Interim assessment 2</b> To cover CS00, 01, 06, 08 60 minutes	End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Master assessment</b> To cover CS00, 01, 06, 08, 12 60 minutes

# Computer Science

## Curriculum & Rubric Map Overview

2025-2026

Year 8



The table below details the skills and knowledge students will be covering each half term in Computer Science.

Time frames for when students will complete their Interim and Masters Assessments have also been given. Both assessments will aim to assess the knowledge and skills a student has covered up to that point in their education, this also includes the curriculum covered in the previous year/s.

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge and skills that will be covered during this half term.	<u>CS04 Introduction to programming – Scratch</u>  This unit focuses on the three core programming constructs whilst developing computational thinking skills through the design and implementation of algorithms in Scratch.  <ul style="list-style-type: none"> <li>Sequencing</li> <li>Selection</li> <li>Iteration</li> </ul>	<u>CS10 Websites and HTML</u>  This unit covers using the internet effectively, internet standards, and the creation of webpages using a text-based editor.  <ul style="list-style-type: none"> <li>HTML and CSS</li> <li>Search Engines</li> <li>Efficient searching</li> <li>Threats on the internet</li> </ul>	<u>CS03 Data Science</u>  Students will develop their understanding of the importance of data and data analysis in the modern world.  <ul style="list-style-type: none"> <li>Data vs Information</li> <li>Data Structure</li> <li>Validation</li> <li>Sorting and Searching data</li> <li>Data analysis</li> <li>Data visualisation</li> </ul>	<u>CS16 Computer Networks</u>  This unit covers the principles and design of networks and how computing devices communicate.  <ul style="list-style-type: none"> <li>Types of networks (LAN,WAN)</li> <li>Network hardware</li> <li>The Internet</li> <li>IP Addressing and switches</li> <li>Connecting to the Internet</li> <li>The cloud</li> </ul>	<u>CS05 Python Turtle</u>  This unit builds on the visual programming covered in Year 8, developing text-based programming through  Python Turtle: <ul style="list-style-type: none"> <li>Outputs, inputs and</li> <li>Variables</li> <li>Sequencing</li> <li>Mathematical</li> <li>Operators</li> <li>Algorithms</li> </ul>	<u>CS02 Microbits – Physical computing</u>  This unit develops the understanding of and ability control hardware through visual Programming.  <ul style="list-style-type: none"> <li>Outputs, inputs and</li> <li>Variables</li> <li>Sequencing</li> <li>Mathematical</li> <li>Operators</li> <li>Algorithms</li> </ul>
Assessments	End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Interim assessment 1</b> To cover CS00, 01, 06, 08, 18, 12, 04, 10 60 minutes	End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Interim assessment 2</b> To cover CS00, 01, 06, 08, 18, 12, 04, 10, 03, 16 60 minutes	End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Master assessment</b> To cover CS00, 01, 06, 08, 18, 12, 04, 10, 03 , 16, 05 60 minutes

# Computer Science

## Curriculum & Rubric Map Overview

2025-2026

Year 9



The table below details the skills and knowledge students will be covering each half term in Computer Science.

Time frames for when students will complete their Interim and Masters Assessments have also been given. Both assessments will aim to assess the knowledge and skills a student has covered up to that point in their education, this also includes the curriculum covered in the previous year/s.

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge and skills that will be covered during this half term.	<u>CS20 Python programming</u>  This unit builds on the text based programming covered in Year 8, continuing to develop text-based programming through Python: <ul style="list-style-type: none"> <li>• Outputs, inputs and Variables</li> <li>• Sequencing</li> <li>• Mathematical</li> <li>• Operators</li> <li>• Algorithms</li> <li>• Computational thinking</li> <li>• Debugging</li> </ul>	<u>CS14 Cyber Security</u>  This unit continues to develop students understanding of E-Safety and Security. <ul style="list-style-type: none"> <li>• Social Engineering</li> <li>• Hacking</li> <li>• Bots and DDoS</li> <li>• Security measures</li> </ul>	<u>CS21 Ethics</u>  This develops pupils understanding of the ethical issues within computer Science. <ul style="list-style-type: none"> <li>• Automation</li> <li>• Self-driving cars</li> <li>• Machine learning</li> <li>• The use of AI</li> </ul>	<u>CS22 Computational Thinking</u>  This section of the unit focusses on the use of computational thinking algorithms. <ul style="list-style-type: none"> <li>• Algorithms</li> <li>• Representing algorithms using flowcharts</li> <li>• Searching algorithms</li> <li>• Sorting algorithms</li> <li>• Abstraction</li> <li>• Decomposition</li> </ul>	<u>CS22 Computational Thinking</u>  This unit introduces students to the ways in which computers represent different types of data. <ul style="list-style-type: none"> <li>• Binary</li> <li>• Text</li> <li>• Images</li> <li>• Graphics</li> </ul>	<u>CS15 3D modelling and animation</u>  This unit introduces students to 3D Modelling and Animation. <ul style="list-style-type: none"> <li>• Simple models</li> <li>• Animation</li> <li>• Complex models</li> <li>• Organic modelling</li> </ul>
	<b>Assessments</b> End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Interim assessment 1</b> To cover Y7/8 content plus CS20, 14 60 minutes	End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Interim assessment 2</b> To cover Y7/8 content plus CS20, 14, 21, 22 60 minutes	End of topic iterative test comprising of multiple choice, short answer and long answer questions.	<b>Master assessment</b> To cover Y7/8 content plus CS20, 14, 21, 22 60 minutes

# Computer Science

## Curriculum & Rubric Map Overview

2025-2026

Year 10



The table below details the skills and knowledge students will be covering each half term in Computer Science.

Time frames for when students will complete their Interim and Masters Assessments have also been given. Both assessments will aim to assess the knowledge and skills a student has covered up to that point in their education, this also includes the curriculum covered in the previous year/s.

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge and skills that will be covered during this half term.	Introduction to Computer Science	<b>Paper 1 Computer Systems</b>  1.1 Systems Architecture	<b>Paper 1 Computer Systems</b>  1.2 Memory and Storage	<b>Paper 1 Computer Systems</b>  1.3 Computer Networks 1.4 Network Security	<b>Paper 1 Computer Systems</b>  1.5 Systems Software 1.6 Ethical, Legal, Cultural and environmental	<b>Paper 1 Computer Systems</b>  2.1 Algorithms 2.2 Programming Fundamentals
	Introduction to Programming	<b>Paper 2 Computational thinking, Algorithms and Programming</b>  Computational thinking and Python Programming Projects				
Assessments		<b>Interim assessment 1</b> To cover 1.1 30 minutes		<b>Interim assessment 2</b> To cover 1.1, 1.2 30 minutes		<b>Master assessment (mock exams)</b> <b>Computer systems:</b> Written examination, 1hour 30 minutes

# Computer Science

## Curriculum & Rubric Map Overview

2025-2026

Year 11



The table below details the skills and knowledge students will be covering each half term in Computer Science.

Time frames for when students will complete their Interim and Masters Assessments have also been given. Both assessments will aim to assess the knowledge and skills a student has covered up to that point in their education, this also includes the curriculum covered in the previous year/s.

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge and skills that will be covered during this half term.	<b>Paper 2 Computational thinking, Algorithms and Programming</b>  2.3 Producing Robust Programs  2.4 Boolean Logic	<b>Paper 2 Computational thinking, Algorithms and Programming</b>  2.5 Programming Languages and IDE's	<b>Revision</b>  Paper 1 - Computer Systems	<b>Revision</b>  Paper 2 – Computational thinking, Algorithms and Programming		
Assessments		<b>Interim 1 (mock exams)</b> <b>Paper 1 exam</b> <b>Computer systems:</b> Written examination, 1hour 30 minutes (50% of qualification)  <b>Paper 2 exam Computational thinking, Algorithms and Programming:</b> Written examination, 1hour 30 minutes (50% of qualification)		<b>Interim 2 (mock exams)</b> <b>Paper 1 exam</b> <b>Computer systems:</b> Written examination, 1hour 30 minutes (50% of qualification)  <b>Paper 2 exam Computational thinking, Algorithms and Programming:</b> Written examination, 1hour 30 minutes (50% of qualification)	<b>GCSE</b> <b>Paper 1 exam</b> <b>Computer systems:</b> Written examination, 1hour 30 minutes (50% of qualification)  <b>Paper 2 exam Computational thinking, Algorithms and Programming:</b> Written examination, 1hour 30 minutes (50% of qualification)	

