

GCSE Computer Science Revision List

Paper	Date	Start time	Duration
Paper 1 Computer systems	Friday 6 November 2026	1.00 pm	90 minutes
Paper 2 Computational thinking, algorithms and programming	Thursday 12 November 2026	8.45 am	90 minutes

Use this list to organise your revision. Tick each topic once you have revised it and practised questions without using your notes.

Paper 1 Computer systems

Focus on topics 1.1 to 1.2. Memory and Storage

Topics to revise	Revised
Systems architecture: CPU components, registers, Von Neumann architecture and the fetch decode execute cycle.	☐
CPU performance and embedded systems; input, process and output.	☐
Memory and storage: RAM, ROM, cache, virtual memory and secondary storage devices.	☐
Data units and calculations: bits to petabytes, file sizes and storage capacity.	☐
Binary and hexadecimal: conversions, binary addition, overflow and binary shifts.	☐
Data representation: character sets, images, sound and compression.	☐

Paper 2 Computational thinking algorithms and programming

All topics from year 10.

Topics to revise	Revised
Computational thinking: abstraction, decomposition and algorithmic thinking.	☐
Algorithms: pseudocode, flowcharts, structure diagrams, trace tables and correcting errors.	☐
Searching and sorting algorithms, including when they are suitable.	☐
Programming fundamentals: variables, data types, operators, sequence, selection and iteration.	☐
Programming techniques: strings, casting, arrays, subprograms, file handling and SQL.	☐
Robust programs: validation, authentication, maintainability, testing and test data.	☐
Boolean logic: AND, OR and NOT, logic circuits and truth tables.	☐
Programming languages and integrated development environments IDEs.	☐

Revision resources

- [GCSE Computer Science area on the Computer Science & IT SharePoint](#)
- [Craig and Dave YouTube Channel](#)
- [Teach ICT J277](#)
- [Knowledge Organisers for all GCSE topics](#)
- [Practice Papers](#)
- [GCSE Exam Revision folder on SharePoint](#)
- Educake