

CAMBRIDGE INTERNATIONAL AS & A LEVEL

Computer Science 9618

Assessment Overview

Examinations 2027, 2028 and 2029

How the qualification is assessed

The table shows the papers and components described for this syllabus. AS candidates take the designated AS components; the full A Level includes the additional components shown. A component's raw mark is the total available on that assessment; its weighting is the share of the qualification result, which may differ from its share of raw marks.

Paper or component	Duration	Raw marks	Weighting	Question or task structure
1: Theory Fundamentals	1 h 30 min	75	AS 50%; A 25%	Compulsory theory questions
2: Fundamental Problem-solving and Programming Skills	2 h	75	AS 50%; A 25%	Written algorithms in Cambridge pseudocode
3: Advanced Theory	1 h 30 min	75	A 25%	Compulsory advanced theory questions
4: Practical	2 h 30 min	75	A 25%	Computer-based programming and testing; no internet/email

Read the weighting against your qualification route. A longer paper or a larger raw-mark total does not automatically mean a greater final weighting. Prepare for every component that applies to you, including practical, oral or coursework requirements where specified.

What each component requires

For the AS Level, you take Papers 1 and 2.

Paper 1, Theory Fundamentals, lasts one hour and thirty minutes. It carries 75 marks and contributes 50 per cent of the AS Level, or 25 per cent of the full A Level. It contains compulsory questions covering information representation, communication, hardware, processors, software, security, ethics and databases.

Paper 2, Fundamental Problem-solving and Programming Skills, lasts two hours. It also carries 75 marks and contributes 50 per cent of the AS Level, or 25 per cent of the full A Level. It is a written paper assessing algorithms, data structures, programming concepts and software development. Answers involving algorithms must be written in the Cambridge pseudocode format; you are not required to write executable programming code.

For the full A Level, you also take Papers 3 and 4.

Paper 3, Advanced Theory, lasts one hour and thirty minutes. It carries 75 marks and contributes 25 per cent of the full qualification.

Paper 4 is a two-hour-and-thirty-minute practical programming examination, also worth 75 marks and 25 per cent. You work on a computer without internet or email access, write complete program code and submit evidence of testing. The permitted languages are Java in console mode, Visual Basic in console mode, or Python in console mode.

Calculators are not permitted in any paper.

The qualification may be completed through a staged or linear route. AS Level grades range from a to e, while full A Level grades range from A star to E.

Preparing the right kind of response

Use the scenario to decide which facts or techniques are relevant. Explain why a design choice meets a requirement. Where a practical component applies, develop fluency in the permitted environment, save work correctly and produce the requested evidence. For written algorithms, use the conventions required by the syllabus.

The assessment objectives are visible in the response itself: relevant knowledge, appropriate use of the stimulus or task, a clear method or explanation, and a conclusion where requested. The command word and mark allocation help show the depth required. An answer should respond to the actual question, not reproduce a memorised passage that only partly fits.

Timing and examination arrangements

Begin preparation with accurate, untimed work, then move towards the duration and conditions of your required component. Use mark allocations to guide pacing while allowing time to read instructions and check the response. Any practice pacing advice is study guidance, not a new Cambridge time rule.

Examinations are available in the June and November series. Private candidates may enter, provided their approved centre can make the necessary arrangements for the practical programming examination.

An approved examination centre confirms entries, available component options, deadlines and any practical or speaking arrangements. Preparation-course access does not itself constitute an examination entry.

Key pointers: Know your required components, follow question choices precisely and practise the relevant response formats. **Next:** Open **Learning Resources** to see which materials support this preparation.