

GCSE Examiners' Report

Computer Science
GCSE
Summer 2025

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Introduction

Our Principal Examiners' report provides valuable feedback on the recent assessment series. It has been written by our Principal Examiners and Principal Moderators after the completion of marking and moderation, and details how candidates have performed in each component.

This report opens with a summary of candidates' performance, including the assessment objectives/skills/topics/themes being tested, and highlights the characteristics of successful performance and where performance could be improved. It then looks in detail at each unit, pinpointing aspects that proved challenging to some candidates and suggesting some reasons as to why that might be.¹

The information found in this report provides valuable insight for practitioners to support their teaching and learning activity. We would also encourage practitioners to share this document – in its entirety or in part – with their learners to help with exam preparation, to understand how to avoid pitfalls and to add to their revision toolbox.

Further support

Document	Description	Link
Professional Learning / CPD	Eduqas offers an extensive programme of online and face-to-face Professional Learning events. Access interactive feedback, review example candidate responses, gain practical ideas for the classroom and put questions to our dedicated team by registering for one of our events here.	https://www.eduqas.co.uk/home/professional-learning/
Past papers	Access the bank of past papers for this qualification, including the most recent assessments. Please note that we do not make past papers available on the public website until 12 months after the examination.	Portal by WJEC or on the Eduqas subject page
Grade boundary information	Grade boundaries are the minimum number of marks needed to achieve each grade. For unitised specifications grade boundaries are expressed on a Uniform Mark Scale (UMS). UMS grade boundaries remain the same every year as the range of UMS mark percentages allocated to a particular grade does not change. UMS grade boundaries are published at overall subject and component level. For linear specifications, a single grade is awarded for the subject, rather than for each component that contributes towards the overall grade. Grade boundaries are published on results day.	For unitised specifications click here: Results and Grade Boundaries and PRS (eduqas.co.uk)

¹ Please note that where overall performance on a question/question part was considered good, with no particular areas to highlight, these questions have not been included in the report.

Exam Results Analysis	Eduqas provides information to examination centres via the WJEC Portal. This is restricted to centre staff only. Access is granted to centre staff by the Examinations Officer at the centre.	Portal by WJEC
Classroom Resources	Access our extensive range of FREE classroom resources, including blended learning materials, exam walk-throughs and knowledge organisers to support teaching and learning.	https://resources.eduqas.co.uk/
Bank of Professional Learning materials	Access our bank of Professional Learning materials from previous events from our secure website and additional pre-recorded materials available in the public domain.	Portal by WJEC or on the Eduqas subject page.
Become an examiner with WJEC.	We are always looking to recruit new examiners or moderators. These opportunities can provide you with valuable insight into the assessment process, enhance your skill set, increase your understanding of your subject and inform your teaching.	Become an Examiner Eduqas

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Executive Summary

Candidate performance in the Summer 2025 series of the Eduqas GCSE Computer Science qualification demonstrated a broadly consistent standard with previous years, with a slight improvement in the mean score for Component 1. The assessment covered a wide range of content and skills across both components, with candidates generally performing better in knowledge recall and structured tasks than in open-ended or evaluative questions.

In Component 1, candidates showed strength in areas such as truth tables, binary addition, and identifying network hardware. However, challenges remained in certain topics, including the OSI model, number representation, and ASCII character encoding. While most candidates could identify cybersecurity threats, fewer were able to explain them in depth or describe effective protection methods. The mean score increased slightly, indicating marginal improvement in overall performance.

Component 2, the practical programming unit revealed a mixed picture. Candidates were generally successful in tasks involving file handling, GUI elements, and testing applications. There was noticeable improvement in algorithm design, suggesting that centres had responded well to previous feedback. However, a significant number of candidates struggled with implementing their own code and evaluating their development process. The increase in non-attempted questions was a concern, particularly in the programming implementation section, which may reflect a lack of confidence in this area.

Across both components, common themes included limited depth in qualitative responses, inconsistent use of technical terminology, and difficulties with more abstract or multi-step tasks. There was also evidence of candidates not fully engaging with the command words in questions, leading to incomplete or misdirected answers.

Key areas for improvement include understanding and applying number systems (binary, hexadecimal), ASCII and character encoding, the OSI model, semantic analysis in translation, and the ability to write and refine code independently. Additionally, candidates should be encouraged to develop their evaluative skills and to annotate code with greater precision.

To support future performance, centres are encouraged to make use of the extensive range of free Eduqas resources, including blended learning materials, exam walk-throughs, and knowledge organisers available on the Eduqas website. Professional Learning events and exemplar materials from previous series also offer valuable insights into effective teaching strategies and assessment preparation.

COMPUTER SCIENCE

GCSE

Summer 2025

Component 1 – Understanding Computer Science

Overview of the Component

Unit 1 contributes 50% of the qualification and assesses a range of assessment objectives (AO) as follows:

AO1 – 60 marks

Demonstrate knowledge and understanding of the key concepts and principles of computer science.

AO2 – 30 marks

Apply knowledge and understanding of key concepts and principles of computer science.

AO3 – 10 marks

Analyse problems in computational terms:

- To make reasoned judgements
- To design, program, evaluate and refine solutions.

During this series, a wide range of content was assessed, including:

- Central Processing Unit
- Primary and Secondary storage
- Logical Operators
- Boolean Logic
- Network hardware
- Internet
- Representation of numbers
- Representation of characters
- Operating systems
- Algorithms
- Translators
- Legislation
- Cyber security

The mean total for Unit 1 this series was approximately 45 out of 100 marks. This represents an increase when compared with the mean total of 44 out of 100 in 2024.

Comments on individual questions/sections

Q1. Most candidates could describe the hardware components listed, while most candidates described how cache and clock speed enhance efficiency. Only a few could identify suitable drawbacks.

Q2. Most candidates could tick the correct primary storage. However, few correctly completed the table comparing secondary storage.

Q3. Part (a) was one of the best answered questions, with most candidates completing the truth table correctly. Part (b), involving Boolean simplification was more challenging but still completed well by most candidates.

Q4. Many candidates could state the function of the identified network hardware. The second part of the question involving the OSI model was less well answered, with many candidates listing the layers but not describing their functions.

Q5. Most candidates were able to identify parts of a URL such as the protocol and domain name. The second part, involving the order of DNS operations, was better answered than in previous series, with many correctly identifying steps like querying a root server and resolving the IP address.

Q6. Most candidates could perform the binary addition in part (b) accurately. However, part (a)(i) and (ii), involving number representation in hexadecimal and binary were less well answered. In part (c), only stronger candidates clearly demonstrated the arithmetic shift and explained its effect.

Q7. Few candidates correctly identified the ASCII table and therefore had limited answers to the following questions.

Q8. Many candidates correctly identified IDE tools from a word bank. Fewer were able to describe the function of debugging tools like breakpoints or variable watch.

Q9. Most candidates could correctly write an algorithm to carry out a single validation check. Fewer candidates were able to identify five different validation checks and write the pseudocode for these.

Q10. Most candidates were able to tick the correct translator types in part (a). In part (b), lexical analysis was better understood than semantic analysis. Some confused it with syntax or logic errors. Overall, responses showed partial understanding of the stages of translation.

Q11. Almost half of candidates were able to explain the purpose of a code of conduct.

Q12. Most candidates could name common cybersecurity threats such as viruses or phishing, but fewer described them clearly. In part (b), many were able to give basic protection methods like firewalls and anti-malware, though some repeated the same idea. Stronger responses explained how each method helps reduce risk.

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Component 2 – Computer Programming

Overview of the Component

This practical programming unit assessed candidates' ability to problem solve, design algorithms, implement programming concepts and test applications using given data.

- Most candidates were able to test applications and provide the required evidence.
- Many candidates struggled when creating their own code to solve a given problem.
- This season there has been an increase in non-attempted questions or missing work.

Comments on individual questions/sections

Q.1 - The majority of the available marks were awarded to candidates for this question on file handling, GUI use and understanding of authentication (login/passwords). This cybersecurity-based question was well answered.

Q.2 & Q.3 - Candidates scored well identifying programming constructs from the provided python files. The quality of the annotation was at times limited and candidates do need to annotate in close reference to the correct lines of code and not at the top of the module.

Q.4 - This question assessing algorithm design and composition has seen an improvement in candidates' responses. Centres have taken previous feedback on board and focused on this section.

Q.5 - The new programming implementation question assessed programming using the Python programming language. There was rise in the number of candidates not attempting this question in comparison to previous years.

Q. 6 - This section assessed candidates' ability to enter and use test data to test the functionality of the programming completed in previous questions. This question was answered well.

Q. 7 & Q.8 - The programming refinement question assessed programming adaptations using the Python programming language. It was pleasing to see that many candidates had been well prepared and could attempt this question.

Q. 9 - Some candidates were unable to effectively evaluate the progress they made during the examination. Some candidates did not review the changes made during development and some candidates could not expand on their work.

Supporting you

Useful contacts and links

Our friendly subject team is on hand to support you between 8.30am and 5.00pm, Monday to Friday.

Tel: 02920 265 401

Email: CS@edugas.co.uk

Qualification webpage: [GCSE Computer Science | Edugas](#)

See other useful contacts here: [Useful Contacts | Edugas](#)

CPD Training / Professional Learning

Access our popular, free online CPD/PL courses to receive exam feedback and put questions to our subject team, and attend one of our face-to-face events, focused on enhancing teaching and learning, providing practical classroom ideas and developing understanding of marking and assessment.

Please find details for all our courses here: <https://www.edugas.co.uk/home/professional-learning/>

Regional Rep Team

Our regional team covers all areas of England and can provide face-to-face and online advice at a time which is convenient to you.

Get in contact today and discover how our team can support you and your students.

[Regional Support Team | Edugas](#)

Edugas Qualifications

We are one of the largest providers of qualifications for schools, academies, sixth form and further education colleges across England, offering valued qualifications to suit a range of abilities. Each and every one of our qualifications is carefully designed to engage students and to equip them for the next stage of their lives.

We support our education communities by providing trusted qualifications and specialist support, to allow our students the opportunity to reach their full potential.



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