



OxfordAQA International AS/A-level

Computer Science (9645)

CS01/CS03/TN Teachers' Notes

For International AS exams in June 2025 onwards For international A2 exams in June 2026 onwards

This booklet contains **important information** for centres preparing for International AS Computer Science Unit 1 (CS01) and International A2 Computer Science Unit 3 (CS03) on-screen exams.

The purpose of this booklet is to:

- give instruction in the preparation of the centre's network for use in the exam
- provide support and guidance for centres in their management of the exam.

In the electronic version of this document, there are links to the Joint Council for Qualifications (JCQ)

This document should be read in conjunction with the JCQ document

Instructions for Conducting Exams (ICE)

which is available on the JCQ website.

The responsibilities of the head of centre

It is the responsibility of the head of the centre to ensure:

- that appropriate security systems are in place to prevent unauthorised access to exam materials, including candidates' work
- that OxfordAQA's requirements for the availability of the question paper, electronic answer document (EAD) and any data files to candidates for the exam are met in advance of the exam
- proper conduct of the exam in accordance with these *Teachers' Notes* and the JCQ Instructions for Conducting Exams (ICE)
- a sufficient provision of resources and appropriate system security as detailed in this document
- that candidates are made aware of the requirements of the exam.

1 Security

The centre must be able to demonstrate to an Inspector, should they visit, that appropriate security systems are in place to prevent unauthorised access to the exam materials. These systems must ensure that:

- electronic exam materials are stored securely at all times, including before, during and after the exam. All wireless capabilities must be disabled or otherwise made secure, for example, by encryption
- candidate exam password information is stored securely and given to candidates only at the start of the session for the exam. Only exam administrators and the candidate can have access to a candidate's password which gives the candidate access to the on-screen exam
- expertise to access, administer and support the exam is available.

2 Materials a centre can expect to receive via Centre Services

All materials for the exam will be issued as follows.

- The question paper will be sent in hard copy to the examinations officer. It must only be opened on the day of the exam in front of candidates.
- The *Teachers' Notes* will be issued electronically on Centre Services on **1 September** (May/June series) and **1 May** (January series) in the year prior to the exam.
- Three calendar days prior to the exam, the remaining exam material will be published electronically on Centre Services. You will need to log in to Centre Services, www.aqa.org.uk/log-in and select Centre Services. Then follow the path below:

Resources > Assessment and Training > Computer Science and IT

Released 1 September (May/June series) or 1 May (January series)

• the Teachers' Notes (CS01/03/TN) in PDF format.

Teachers are free to teach to and issue the Teacher's Notes to their candidates as soon as they appear on Centre Services.

Released three calendar days prior to the exam

- the *Electronic Answer Document* (EAD) in which candidates will type/screenshot their answers to the question paper during the exam. **This will be provided as a Microsoft® Word document** (See Appendix 1, Section B of these *Teachers' Notes* if your centre's software is not compatible with this format).
- Advice on using the EAD in PDF format.
 Centres may issue copies to their candidates. (This Advice is replicated in Appendix 1 of these Teachers' notes).
- the Data Files (CS03 only if applicable to the exam session). If used, these will be text files that accompany a CS03 exam.
 - CS01 exams do not use data files as this is an A2 only topic.

Centres must ensure that the EAD and any data files are kept secure and only made available to candidates at the start of the exam.

3 The Electronic Answer Document (EAD) and data files (if applicable)

Candidates must not have access to the EAD or data files (if applicable) until the start of the exam. Before the exam, load a copy of the EAD and any data files into the student's account areas, ready for them to use.

Note: it is extremely important that, **before the exam**, a check is made to ensure that the uploaded EAD and data files to be used in the exam are the correct versions ie the latest version as issued by OxfordAQA.

The EAD **must not** be made available to candidates until just before the exam. Candidates can enter their details onto the EAD before the exam time starts.

4 Timetabling

- 4.1 Centres must arrange for **each** candidate to be allowed to complete the exam in the allotted time: two hours for CS01 and two hours and 30 minutes for CS03.
- 4.2 Centres that are unable to accommodate all their candidates in the timetabled session of the exam will need to ensure that candidates awaiting the exam are supervised under exam conditions from the published starting time of the exam until their exam is completed.
- 4.3 Candidates awaiting their exam must not have access to any means of external communication including mobile telephones, the Internet or computers. Anyone wishing to leave the supervised area must be escorted by a member of staff.
- 4.4 There will be one attendance register for the exam. This must be fully completed at the end of the final session (if more than one).
- 4.5 An accurate seating plan of candidates present at each session must be kept.
- 4.6 Candidates may only sit the exam once in any exam series.

5 Accommodation

- 5.1 Centres must ensure that:
 - the accommodation is suitable for an exam room in accordance with JCQ ICE, Appendix 1, Section 6
 - a sufficient number of workstations are available, including at least one replacement computer and printer, and a supply of easily replaced items (eg mouse).
- 5.2 A computer must be made available for each candidate on a 1:1 basis. In advance of the exam, each workstation **must** be tested to ensure it is in full working order for the purpose of the exam.
- 5.3 Whilst the layout of the exam room cannot be specifically prescribed, centres should ensure that:
 - each workstation in use by candidates is isolated by a minimum space of 1.25 metres
 measured from the nearest outside edge of one screen to the next, unless monitors are
 positioned back to back or separated by dividers or privacy screens. Where it is not
 possible to arrange the workstations with this space, it is recommended that only every
 second workstation is used
 - the arrangement of workstations and the position of the invigilator's desk should facilitate detection of any unauthorised activity by candidates, eg communication with others or use of unauthorised reference material.
- 5.4 Candidates must be given sufficient workspace to allow them unrestricted access to the computer and to carry out non-computer activities, such as checking and collating print-outs, and the use of additional permitted materials, ie their question paper.
- 5.5 The room should have sufficient lighting, heating and ventilation. The computer screens should be placed to avoid excessive reflection.
- 5.6 The following JCQ notices must be displayed according to Appendix 1, Section 5 of the ICE:
 - Warning to Candidates
 - Mobile Phone Poster.
- 5.7 The centre number, session, start and finish times should be displayed prominently. A clock should also be visible to all candidates.
- 5.8 All display material must either be completely covered up or removed from the exam room.
- 5.9 A copy of the JCQ ICE document should be available to the invigilator in the exam room.

6 Preparation of your centre's computer network

- 6.1 Centres must set up on their network a separate secure user area for each candidate sitting the exam. Each candidate must be assigned an individual candidate user name and password which is not the one they have used throughout the academic year. These user areas must not be accessible to candidates at any time other than during the exam session. (Candidates must be advised at the start of the exam of the need to save regularly in a user- created directory structure that protects against accidental overwriting that would result in the loss of work.)
- 6.2 Each candidate's access to their user area must be blocked at the end of the exam session. If any candidates are sitting the exam at a later session, centres must ensure that the user

areas of those who have already sat the exam cannot be accessed. Different passwords must be used for each candidate.

See Section 13 of these *Teachers' notes* for centres unable to provide a separate candidate user area on the centre network.

- 6.3 Each user area should only have a copy of the files associated with the scheduled exam, and candidates should only have access to the software packages appropriate to the exam. Centres must ensure that the software available to candidates will allow them to meet the requirements of the exam. The software required is:
 - the appropriate programming language development system which your candidates are going to use in the exam
 - a word processor
 - a text editor
 - image editing software or screen capture software where this is not already provided by the computer's operating system.
- 6.4 Centres must not store their working files in a shared area. In each user area before the exam begins there should be an individual copy of:
 - the **Data files** if any are required for the exam
 - the EAD file.
- 6.5 Each user area must be allocated sufficient electronic storage space to allow candidates to save their EAD.
- 6.6 Candidates must not be able to save anything during the exam in a central location where anyone can access such material.
- 6.7 Centres should ensure that up-to-date virus protection measures are in place.
- 6.8 Candidates must not have access to:
 - any documents/files other than those required for the exam
 - data stored in shared areas on a network
 - data stored locally or portable storage media (unless the latter is part of an emergency measure brought about by circumstances described in Section 13 of these *Teachers'* notes) other than those required for the exam
- 6.9 **No extra time can be allowed for slow machines or networks which run slowly.** Before the exam, centres must ensure the appropriate hardware and software are available to candidates and there are no problems with the computer facilities.
- 6.10 Well in advance of the exam, centres must ensure that candidates know:
 - where they are to save the work they do during the exam
 - · what file format to use
 - the name format in which to save their work (this must include their centre number and candidate number)
 - about the role of the Print Monitor (see Section 10)
 - how to resize a screen capture (screen dump/screenshot) to ensure that the examiner can read it with ease.

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7 Immediately before candidates start the exam

After issuing the question paper to each candidate and immediately before the start of the exam, candidates must be instructed to load the:

- · programming language software
- word processing software
- Electronic Answer Document.

On the front page of the *Electronic Answer Document* candidates must insert their:

- centre number
- · candidate number
- · candidate name
- programming language.

Into the footer **on every page**, other than the front page, candidates must insert their:

- centre number
- · candidate name
- · candidate number.

They must then **save the** *Electronic Answer Document* with their centre number and their candidate number as the filename.

Candidates must also be reminded of the need to **save regularly** their word processed copy of the *Electronic Answer Document* and the files developed within the programming software in the user-created directory structure that protects against accidental overwriting that would result in loss of work.

The above instructions are vital in order to ensure that at the end of the exam the source of each printout is clear and that a candidate's file can be identified. It may not be possible to credit the whole or part of a candidate's answer if these details are not printed on every page as instructed above.

8 Conduct of the exam

- 8.1 There must be one invigilator for every 20 candidates or fewer. Additional invigilators can be employed at the discretion of the centre to ensure all candidates are in view at all times.
- 8.2 Technical help should be available throughout the exam in case of hardware/software problems and/or to assist with the invigilation of the exam.
- 8.3 A computer science teacher may perform the role of:
 - an invigilator (provided they are not the sole invigilator in the exam room)
 - 'technical help' (in Section 9.2, above) if and when required.
- 8.4 Candidates may bring a pencil/pen and ruler with them into the exam. On request, candidates may be provided with pen and paper to do rough workings. These rough workings must be handed to the invigilator at the end and not removed from the exam room by the candidate. See Section 9.11 below.
- 8.5 Other than the question paper, candidates must not have access to any books or documents whilst sitting the exam. Candidates should only use or have access to permitted software and documents, ie those referred to in Sections 7.3 and 7.4 above.
- 8.6 The exam must be taken under exam conditions and communication between candidates is **not** permitted at any time, including communication via computers. **oxfordaga.com**

- 8.7 Candidates must **not** bring portable storage media (eg memory sticks) into the exam, although, immediately before the start of the exam (as in Section 13.4), some form of portable storage medium may be used by the centre for the provision of the required software to the candidate.
- 8.8 Candidates must **not** have access to pre-prepared templates or other files during the exam except those referred to in Sections 7.3 and 7.4 above.
- 8.9 Candidates may use software-specific help facilities that use local files. It is expected that the programming language software will include the normal help files as supplied with the original software. If the software uses non-local files located on the Internet, candidates must **not** be able to access these help facilities. If the software has both local and non-local help facilities, candidates may use the local files only; access to the non-local help facilities must be disabled.
- 8.10 No extra time can be allowed for slow machines or networks which run slowly.
- 8.11 Candidates are not allowed to remove anything from the exam room. The invigilator must collect all extraneous candidate materials (eg draft copies of candidates' work, rough work additional printouts and question papers) at the end of the exam (or each exam session, if more than one) and keep these in a secure place until the publication of results by OxfordAQA.

9 Printing

- 9.1 Centres must ensure that the printers are set up to print on A4 or equivalent paper. EADs **must** be printed on one side of paper only.
- 9.2 There is no requirement to print in colour. No extra credit is given for work printed in colour.
- 9.3 A Print Monitor (who should neither be an invigilator nor a candidate, but who could also be the source of technical help) must be assigned to collect and deliver printouts to the candidates. Candidates must **not** be allowed to collect printouts.
- 9.4 It is the responsibility of the Print Monitor to ensure the correct ownership of each printout.
- 9.5 Do not be concerned if the OxfordAQA logo does not appear when the EAD is printed out.

10 At the end of the exam

- 10.1 Before papers are collected by the invigilator, candidates are required to:
 - collate their printouts into question number order
 - attach them securely together in the top left hand corner using a staple or tie. The means of securing the printouts together must be provided by the centre.
- 10.2 Candidates must ensure that their name, centre number and candidate number are on each page of each printout. It is the candidate's responsibility to ensure that these details are correct on each page. Handwritten details are acceptable.
- 10.3 Centres must remind candidates to ensure that their EAD is individually saved on the network in their individual secure work areas. Centres must ensure that these EADs are secure from unauthorised access. Centres must safeguard this work and store it in a manner which will allow an individual's saved work to be easily retrieved if it is required for reprinting. After the exam, the EADs of all candidates must be copied on to a portable storage medium and kept securely by the examinations officer at least until the publication of results.

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- 10.4 All other exam material (eg draft copies of candidates' work, rough work, additional printouts and question papers) must be collected by the invigilator at the end of each session and stored in a secure place until the publication of results.
- 10.5 Immediately after the end of the exam session, each candidate's access to their user area must be blocked. If any candidates are sitting the exam at a later session, centres must ensure that the user areas of those who have already sat the exam cannot be accessed. Different passwords must be used for each candidate.

11 Malpractice

This type of exam relies on the integrity of candidates, teachers and invigilators. If any candidates submit work which is not their own, or any form of malpractice occurs, or is thought to have occurred, it must be reported to OxfordAQA. The matter will be investigated by OxfordAQA and if it is found that the candidate has been involved in malpractice, the candidate may be disqualified from at least the subject concerned.

12 Emergencies

- 12.1 In the event of an emergency, eg a fire alarm sounding, the invigilator should take the following action:
 - evacuate the exam room
 - safeguard the security of assessment content and responses (eg by locking an assessment room which has been evacuated without closing down software)
 - ensure candidates are supervised as closely as possible whilst out of the exam room to ensure there is no discussion about the exam
 - after the candidates' return, note the point and time at which the interruption occurred and the duration
 - allow the candidates the full working time prescribed for the exam
 - make a full report of the incident, and of the action taken, and submit it to OxfordAQA.
- 12.2 In the event of hardware, software and communication failures affecting individual workstations or the network, the centre must ensure candidates continue the assessment session at a different workstation or at a later time, without the loss of working time.
- 12.3 In the event of a total technology failure where candidates are unable to sit the exam (or restart the exam at a later time), the Centre will need to apply for special consideration through Centre Services Special Consideration Online. If the Centre has any queries then these can be sent to info@oxfordaga.com.
- 12.4 Centres unable to provide a separate candidate user area on the centre network can instead provide each candidate with a named/labelled USB pen drive or similar storage medium. Each storage medium must be preloaded with the documents listed in Section 7.4. At the end of the exam the storage medium must be stored as outlined in Section 11.4.

Appendix 1 – Advice on using the *Electronic Answer Document* (EAD)

Centres may give a copy of this advice document to candidates at any time, including during the exam.

The EAD is provided by OxfordAQA to centres as a Microsoft® Word document. Candidates must type their answers to the question paper into the EAD on-screen.

A In advance of the exam

- Centres must ensure that candidates know:
 - where they are to save the work they do during the exam
 - about the role of the Print Monitor
 - how to take and resize a screen capture (screen dump/screenshot) to ensure the examiner can read it with ease.
- The exam is not a test of candidates' typing or word processing skills, but centres are strongly encouraged to ensure that their candidates are familiar with the EAD before the exam. Candidates are free to practise using a past paper or specimen EAD before the exam.

B What to do if the EAD fails for any reason

- When printing the EAD, if it appears to have page breaks in inappropriate places, check whether the margin size on the default printer needs changing. The margins used for the original EAD are: Top – 2.25 cm; Bottom – 1 cm; Left – 1.5 cm; Right – 1.52 cm.
- Do not be concerned if the OxfordAQA logo does not appear or is mis-shapen when the EAD is printed out.
- If your centre's word processing software is not compatible with Microsoft® Word, centres should ask candidates to type their answers into a blank document ensuring that the **front page prominently** carries the following information:
 - OxfordAQA International AS Computer Science Paper 1/A-level Computer Science Paper 3 (as applicable) exam, month + year of exam
 - centre number
 - candidate name
 - candidate number
 - at the end of the exam, the candidate's signature.
- Each subsequent page must also carry the following personal information of the candidate in a footer (either typed in or written by hand):
 - centre number
 - candidate name
 - candidate number.

- Each answer must be clearly numbered. Leave at least one blank line between each answer including each part question, and leave a right hand margin on each page of approximately 3 cm.
- All pages must be securely attached together with a staple or tie in the top left-hand corner.

C Responding to programming questions in the EAD

- Candidates must ensure that all of their code (every line and the full length of every line) for the relevant question is copied into the EAD in a format that can easily be read by an examiner.
- When asked to supply program source code, candidates should copy and paste the
 lines of code from their development environment into their EAD or, if this is not
 possible, they can use screen captures (screen dumps/screen shots), always ensuring
 that all of their code (every line and the full length of every line) is copied and can be
 easily read by an examiner.
- Instructions on using screen captures can be found below.
- If candidates copy and paste their lines of code into the EAD, they must ensure that all formatting remains the same as in their development environment. If any of the formatting is changed so that it would alter the way the program works candidates may not be able to access all of the marks for the question.

END OF TEACHERS' NOTES