

**GCSE Subject Level
Conditions and
Requirements for
Computer Science**
January 2018

Ofqual/18/6340



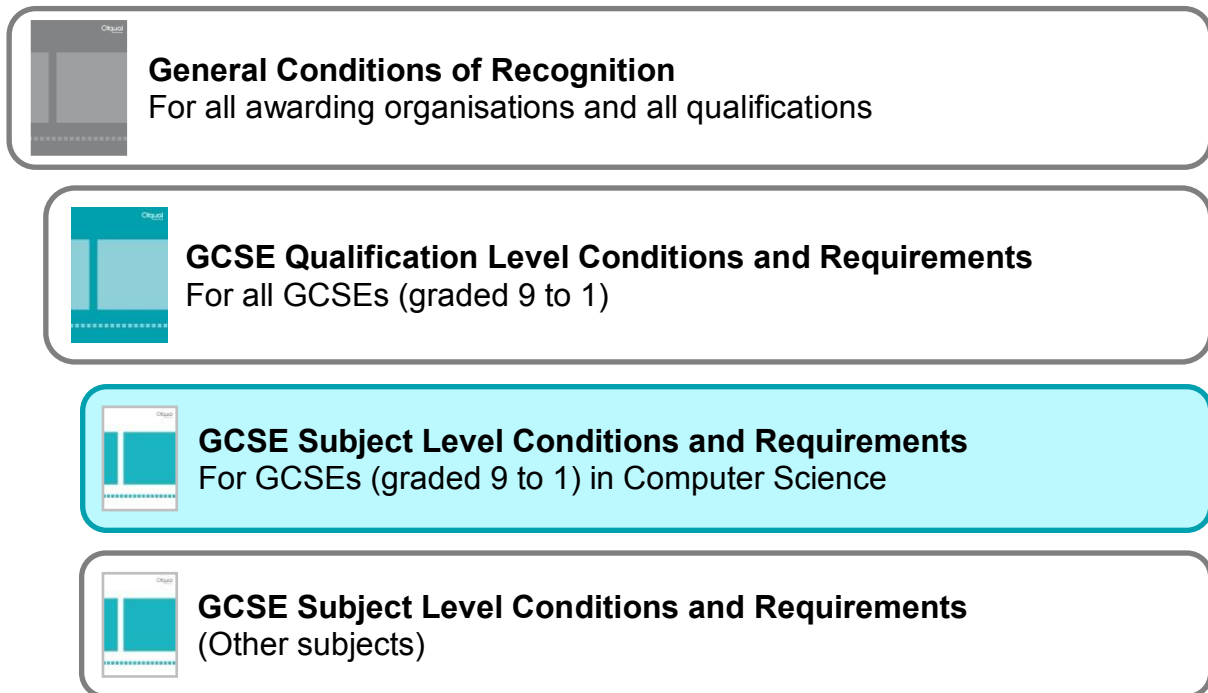
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Introduction

About this document

This document (highlighted in the figure below) is part of a suite of documents which sets out the regulatory requirements for awarding organisations offering GCSE qualifications (graded from 9 to 1).



We have developed these requirements with the intention that GCSE qualifications (graded from 9 to 1) should fulfil the following purposes:

- To provide evidence of students' achievements against demanding and fulfilling content;
- To provide a strong foundation for further academic and vocational study and for employment; and
- To provide (if required) a basis for schools and colleges to be held accountable for the performance of all of their students.

Requirements set out in this document

This document sets out the GCSE Subject Level Conditions for Computer Science. These conditions will come into effect at 12.01am on 15 January 2018 for all GCSE qualifications (graded from 9 to 1) in Computer Science.

It also sets out our requirements in relation to:

- assessment objectives – awarding organisations must comply with these requirements under Condition GCSE(Computer Science)1.2;
- the programming project - awarding organisations must comply with these requirements under Condition GCSE(Computer Science)3.3.

Appendix 1 reproduces the requirements in relation to subject content for GCSE Computer Science,¹ as published by the Department for Education. Awarding organisations must comply with these requirements under Condition GCSE(Computer Science)1.1.

With respect to all GCSE Qualifications (graded from 9 to 1) in Computer Science, awarding organisations must also comply with:

- our *General Conditions of Recognition*,² which apply to all awarding organisations and qualifications;
- our *GCSE Qualification Level Conditions*,³ and
- all relevant Regulatory Documents.⁴

Revisions to this document

We have revised this document since it was originally published (see Appendix 1 for details), most recently in January 2018.

The January 2018 version of this document replaces all previous versions of *GCSE Subject Level Conditions and Requirements for Computer Science* with effect from 12.01 am on 15 January 2018.

¹ www.gov.uk/government/publications/gcse-computer-science

² www.gov.uk/government/publications/general-conditions-of-recognition

³ www.gov.uk/government/publications/gcse-9-to-1-qualification-level-conditions

⁴ www.gov.uk/government/publications/regulatory-documents-list

Summary of requirements

Subject Level Conditions	
GCSE(Computer Science)1	Compliance with content requirements
GCSE(Computer Science)2	Assessment

Assessment objectives
Assessment objectives – GCSE Qualifications in Computer Science

Programming project requirements
Requirements in relation to the programming project for GCSE Qualifications in Computer Science

Appendix 1 – Subject content (published by Department for Education)
Computer Science: GCSE subject content

Subject Level Conditions

GCSE Subject Level Conditions for Computer Science

Condition GCSE(Computer Science)1 Compliance with content requirements

- GCSE(Computer Science)1.1 In respect of each GCSE Qualification in Computer Science which it makes available, or proposes to make available, an awarding organisation must –
- (a) comply with the requirements relating to that qualification set out in the document published by the Secretary of State entitled ‘Computer science GCSE subject content’,⁵ document reference DFE-00701-2014,
 - (b) have regard to any recommendations or guidelines relating to that qualification set out in that document, and
 - (c) interpret that document in accordance with any requirements, and having regard to any guidance, which may be published by Ofqual and revised from time to time.
- GCSE(Computer Science)1.2 In respect of each GCSE Qualification in Computer Science which it makes available, or proposes to make available, an awarding organisation must comply with any requirements, and have regard to any guidance, relating to the objectives to be met by any assessment for that qualification which may be published by Ofqual and revised from time to time.

⁵ www.gov.uk/government/publications/gcse-computer-science

Condition GCSE(Computer Science)2 Assessment

GCSE (Computer Science)2.1 Not used

GCSE (Computer Science)2.2 Not used

GCSE(Computer Science)2.3 Not used

Condition GCSE(Computer Science)3 Programming Project

- GCSE(Computer Science)3.1 In respect of each assessment cycle for a GCSE Qualification in Computer Science which it makes available, an awarding organisation must –
- (a) require each Centre to provide a programming project statement to the awarding organisation, and
 - (b) treat any failure by a Centre to provide a programming project statement to the awarding organisation in a timely manner as malpractice and/or maladministration (under General Condition A8 (*Malpractice and maladministration*)).
- GCSE(Computer Science)3.2 For the purposes of this condition, a ‘programming project statement’ is a true and accurate written statement made by a Centre to an awarding organisation which confirms that it has taken reasonable steps to secure that each Learner to which that Centre has delivered the assessments to be taken in a particular assessment cycle for a GCSE Qualification in Computer Science which the awarding organisation makes available –
- (a) has had the opportunity to undertake the programming project and has had 20 hours set aside in the timetable to allow them to undertake the project, and
 - (b) that their written accounts of their programming project represent their individual work, cover each part of the project and reference any resources used or support given.
- GCSE(Computer Science)3.3 An awarding organisation must ensure that in respect of each GCSE Qualification in Computer Science which it makes available it complies with any requirements, and has regard to any guidance, concerning the programming project, which may be published by Ofqual and revised from time to time.

Assessment objectives

Assessment objectives – GCSE Qualifications in Computer Science

Condition GCSE(Computer Science)1.2 allows us to specify requirements relating to the objectives to be met by any assessment for all GCSE Qualifications in Computer Science.

The assessment objectives set out below constitute requirements for the purposes of Condition GCSE(Computer Science)1.2. Awarding organisations must comply with these requirements in relation to all GCSE Qualifications in Computer Science they make available or propose to make available.

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of the key concepts and principles of computer science.	35 – 40%
AO2	Apply knowledge and understanding of key concepts and principles of computer science.	45 - 50%
AO3	Analyse problems in computational terms: <ul style="list-style-type: none"> ■ to make reasoned judgements ■ to design, program, evaluate and refine solutions. 	15 – 20%

Requirements for the programming project

Requirements in relation to the programming project for GCSE Qualifications in Computer Science

Condition GCSE(Computer Science)3.3 allows us to specify requirements and guidance in relation to the programming project for GCSE Qualifications in Computer Science.

We set out our requirements for the purposes of Condition GCSE(Computer Science)3.3 below.

Programming languages

For each GCSE Qualification in Computer Science which it makes available, or proposes to make available, an awarding organisation must ensure that –

- (a) it sets out in the specification for that qualification the programming language(s) which Learners are permitted to use for the purposes of the programming project,
- (b) each such programming language is a high-level programming language that has a textual program definition, and
- (c) it justifies its choice of permitted programming language(s) in its assessment strategy for the qualification.

Programming Projects

An awarding organisation must ensure that each programming project –

- (a) is designed and set on the basis that it should be completed by each Learner during 20 hours set aside in the timetable,
- (b) is designed and set to be taken under conditions specified by the awarding organisation, including, in particular, conditions which support the Centre in ensuring that the evidence generated by each Learner can be Authenticated, and
- (c) requires each Learner to undertake a single project which leads to the generation of the following evidence –
 - (i) a program designed, written, tested and refined by the Learner, either to a specification or to solve a problem, using one or more of the programming languages specified by the awarding organisation, and
 - (ii) a written report.

A programming project for a GCSE Qualification in Computer Science may be set –

- (a) by the awarding organisation, or

(b) by a Centre.

In any event, the awarding organisation must demonstrate to Ofqual's satisfaction in its assessment strategy that –

- (a) it has taken all reasonable steps to identify the risk of any Adverse Effect which may result from its approach to setting the programming project, and
- (b) where such a risk is identified, it has taken all reasonable steps to prevent that Adverse Effect or, where it cannot be prevented, to mitigate that Adverse Effect.

Subject content (published by Department for Education)

Appendix 1 – Revisions to this document

The table below sets out all revisions to this document since it was first published, and the dates on which those revisions came into force.

Revision	Date in force
Requirements in relation to assessment by examination only	January 2018
Requirements in relation to programming projects	January 2018
Requirements in relation to assessment objective weightings	January 2018
First published	May 2015

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