

Computing Science

The Qualifications Team

Robbie Paterson

Qualifications Manager

Scott Durkin

Qualifications Officer

Raymond Simpson

Subject Implementation Manager

Greg Reid

Subject Implementation Manager

Changes to assessment at National 5, Higher and Advanced Higher

As announced by the Deputy First Minister in September 2016, units and unit assessments are being removed from National 5, Higher and Advanced Higher courses on a phased basis over three years:

- National 5 from 2017–18
- Higher from 2018–19
- Advanced Higher from 2019–20

For more information, including a Q&A on the implications of these changes, please visit our website at www.sqa.org.uk/nqchanges

Units that were previously part of National 5 courses

The units that were previously part of National 5 courses are now freestanding units at SCQF level 5. They can no longer be used to contribute to the achievement of a National 5 course.

We will remove all references to National 5 courses from the unit specifications, unit support notes and unit assessment support packs in due course, and the unit support notes will be added to the unit specifications as an appendix. The unit specifications will also be relocated to a new freestanding units web page for each subject.

Further information on the timescales for this will be provided in our weekly Centre News newsletter.

Changes to assessment in National 5

The National 5 Computing Science course is now assessed through the following components:

Component	Marks
Question paper	110
Assignment	50

The assignment is now a single annually issued task. The 2018 assignment task will be available on the secure pages of our website at the end of January 2018.

The assignment will be uplifted by SQA on 21 March 2018 for marking.

Clarification of course content in the National 5 course

Please refer to 'Questions and Answers: Changes to assessment in Computing Science' document, available in the 'Updates and announcements' section of the [National 5 Computing Science web page](#).

Changes to assessment in Higher courses from session 2018–19

Units and unit assessments will be removed from Higher courses from session 2018–19 and we have started our review of the Higher course assessments. For this, we are working closely with our National Qualifications Support Team (NQST). Our NQST includes teachers and lecturers who currently deliver National Courses.

The publication of new and revised Higher materials will follow a similar timescale to National 5:

End of April 2018	Revised Higher course specifications
End of May to end of September 2018	Course support notes New/revised specimen question papers New/revised coursework assessment tasks

In line with National 5, course content in Higher will be clarified as follows:

- The course content will be organised using the same four titles
 - Use of SQL to meet the requirements for database implementation will become mandatory
 - HTML and CSS will be clarified with requirements that are appropriate for Higher and progress from those at National 5
 - Other areas of content will be clarified as appropriate
 - Sections of the previous content will be removed
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Before publication of the course specification in April 2018, we plan to work with Computing at School (Scotland) in order to engage more widely with the profession on the revised content.

We will provide further information on what the changes to assessment are for each subject by the end of January 2018.

Conditions of assessment for coursework

To ensure fairness for all candidates, it is essential that the specified assessment conditions for coursework are consistently applied in all centres. The following documents detail the specific conditions that must be followed in each assessment:

- course specification
- course assessment specification (Higher and Advanced Higher only)
- coursework assessment task

In addition to these documents, you must also refer to the following document, which is available from the coursework section of the National 5, Higher and Advanced Higher web pages:

- [Guidance on conditions of assessment for coursework](#)

This document provides important information on the time and volume of assessment, the use of resources, and the supervision, control and authentication of assessment — including examples.

Changes to documents

New and revised National 5 documents and assessment support materials

Following the removal of units and unit assessments from the National 5 Computing Science course, we have strengthened the course assessment to ensure it assesses the full content of the course.

We have published revised course specifications and new assessment support materials for the National 5 course(s), which detail the requirements of the revised course assessments from session 2017–18 onwards. The documents are available from the National 5 subject web pages at www.sqa.org.uk/nqsubjects. Further information on the changes to documents and assessment support materials is provided below.

Course specification

In April 2017, we published a revised course specification which provided detailed information about the National 5 course and course assessment, including the conditions of assessment that must be followed. The revised document was produced by merging the previous course

specifications, course assessment specifications and general assessment information into a single, streamlined document. Course support notes have been added to the course specification as an appendix. The course support notes now contain the document entitled 'Resources to support the National 5 Computing Science course'.

The course specification is available on the [National 5 Computing Science web page](#).

Course assessment

The changes to the assignment have had an impact on what can be assessed in the question paper. As a result, we have published a new specimen question paper and a specimen assignment task. In any given year, content may be sampled in the assignment and/or the question paper. These assessments will therefore be developed in conjunction with one another. (The specimen question paper and specimen assignment task have been developed in this way.)

Specimen question paper(s)

Some skills, such as design, which previously were mainly assessed in the assignment are now assessed in the question paper.

Implementation (writing code) will predominantly be assessed in the assignment. The question paper will focus on assessing reading, understanding and explaining code. Where the question paper requires code to be written, some form of support will be provided so that candidates are not required to memorise syntax, HTML/CSS code. In such cases, marks are attributed to the use of appropriate constructs rather than use of correct syntax.

The specimen question paper (including marking instructions) is available in the 'Assessment' section the [National 5 Computing Science web page](#).

Coursework assessment task

The specimen coursework assessment task gives an example of how the new assignment will be constructed and provides further guidance on the conditions of assessment.

Teachers and lecturers must not provide assistance to candidates during assessment. The assignment is made up of a series of tasks that are not dependent on one another. Consequently, if a candidate cannot complete one task, they can move onto the next one.

The specimen coursework assessment task (including marking instructions and supporting files) is available on the [National 5 Computing Science web page](#).

A number of centres trialled the specimen assignment with some of their candidates. Candidate evidence and commentaries on the application of the marking instructions are available on our [Understanding Standards web page](#).

Supportive resources

National 5 CPD webinar(s)

To help teachers and lecturers prepare for the changes to assessment in the National 5 course, we ran a series of subject-specific continuing professional development (CPD) webinars that focused on the requirements of the course assessment(s).

Recordings of these webinars are available to view online via our website and can be accessed from the **CPD webinar/audio and support** tab on the [National 5 Computing Science web page](#).

Q&A document on the changes to assessment

During the question and answer section of the National 5 webinar(s), we received a number of questions about the changes to assessment. We have published a Q&A document that provides answers to the questions asked during the webinar, as well as some of the most frequently asked questions we have received from teachers and lecturers. You can access the Q&A document from the [National 5 Computing Science web page](#).

Course assessment events — CPD workshops

At the recent National 5 course assessment events we held three CPD workshops:

- Software design techniques
- Web design and implementation
- Introduction to teaching SQL

Audio presentations and materials from these workshops will be available shortly from the National 5 Computing Science web page.

Past exam questions for revised National 5 Computing Science

We have produced a document which lists questions from past papers that would be suitable for the revised National 5 course content. This may help you to source questions for revision or for prelims. The document is available from the 'Additional course support' section of the [National 5 Computing Science web page](#).

Project Quantum

Project Quantum is a crowd sourced bank of multiple choice questions which has been developed by Computing At School, The Centre for Evaluation and Monitoring, Cambridge Assessment and the Diagnosticquestions.com for the English national curriculum for Computing Science. Although these are not always relevant to the Scottish curriculum you may find some content useful.

The questions are grouped into quizzes and can be accessed at <https://diagnosticquestions.com/>.

In conjunction with Education Scotland we plan to have 80 multiple choice questions (2 x 10 question sets for each of the four areas) relating to the National 5 Computing Science course. We will update you on this in due course via Centre News.

Further information and guidance

Unit assessment thresholds

The thresholds introduced in 2016–17 for the number of assessment standards that all candidates must meet to achieve each unit, must continue to be applied for session 2017–18.

Please refer to the following guidance document when carrying out assessments:

- [Computing Science: Understanding the next steps for session 2016–17](#)

You can view this document on the Computing Science subject page ('Understanding the next steps for Computing Science' section).

Units of storage

We will continue to use the British Computing Society's *Glossary of Computing* to define any technical language that we use in our documentation and question papers.

In our October 2016 Subject Update we confirmed that this style will include the adoption of prefixes such as 'kibi' and 'mebi' in relevant situations (such as calculations related to storage/file sizes) in session 2017–18.

This is intended to distinguish binary prefixes from the metric ones, ie 1ki = 1024 bytes, 1 kb = 1000 bytes (pages 453–455, BCS Glossary of Computing, 14th Edition).

Note: we have removed the requirement for calculation of file size from the National 5 course and we will also review it when we revise Higher Computing Science.

Data Protection Act

The Data Protection Act is covered in the mandatory skills, knowledge and understanding of the National 5 Computing Science course. On 25 May 2018, this legislation will be replaced by the General Data Protection Regulation (GDPR). The course specification will be updated to reflect this change for session 2018–19. Question 3 of the specimen question paper will also be updated.

Appointee recruitment

We are always looking for practising teachers and lecturers to support external assessment. For session 2017–18, we will be recruiting markers for question papers and the National 5 assignment. If you are interested in marking Computing Science at any level, please refer to the [appointee recruitment](#) section of our website.

Course reports

We strongly advise that you read the annual course reports. These reports are produced following the annual diet of exams and provide informed and valuable comment on the assessment for each component in the course. They include a summary of:

- candidate performance in the course assessment
- areas in which candidates performed well
- areas which candidates found demanding

The reports also contain advice on preparing future candidates, and statistical data relating to grade boundaries. Course reports are available from the [Computing Science](#) pages of our website.

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Contact us

Please contact our Customer Support Team:

Tel: 0303 333 0330

Fax: 0345 213 5000

E-mail: mycentre@sqa.org.uk
