

# Computing Science

## The Qualifications Team

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## Diet 2019

### Changes to documents following Diet 2019

#### National 4 Added Value Unit — music fans

During verification activity in May, we discovered that the assessment standards for this task could be met with code that was not at National 4 level.

To address this and to ensure parity across the four Added Value Unit tasks, we have added the requirement to 'use a loop' to the instructions for candidates.

#### Information Systems Design and Development unit at SCQF level 7

In February 2016, we removed outcome 3 from the Information Systems Design and Development unit at SCQF level 7. During verification activity in May 2019, we learned that this change had not been followed through to the unit assessment support packs.

We have updated the following unit assessment support packs to remove reference to outcome 3 and any associated tasks:

- ◆ Package 1: portfolio approach
- ◆ ISDD Package 2: unit-by-unit approach
- ◆ ISDD Package 3: unit-by-unit approach

## Course reports

Please read the annual course reports for Computing Science. We produce these reports following the exam diet and they provide information on how candidates performed in course assessment for National Qualifications.

Course reports include a summary of areas candidates performed well in and areas candidates found demanding. They also contain advice on preparing candidates for future assessment, and statistical data relating to grade boundaries. Course reports are available from the [Computing Science pages](#) of our website.

## Coursework

### Submitting coursework

Please ensure candidates use the current, published coursework assessment tasks.

We will publish the 2019–20 National 5 and Higher assignments on SQA's secure website in January 2020.

The 2019–20 uplift dates are:

- ◆ National 5 assignment                      18 March 2020
- ◆ Higher assignment                            23 April 2020
- ◆ Advanced Higher project                    23 April 2020

Please liaise with your SQA co-ordinator to ensure that all materials are prepared in time for uplift.

## National 5 and Higher

### Implementing the given design

For the National 5 and Higher assignments, teachers often advise us that the programming language they use does not allow for the design to be fully followed. For example, in the 2018-19 National 5 assignment, the algorithm specified a post-conditional loop which cannot be implemented in Python. We design the marking instructions so that candidates can access all marks, regardless of the programming language used.

### Conditions of assessment

To ensure fairness for all candidates, it is essential that you apply the specified assessment conditions for coursework. The following reminders apply to both National 5 and Higher assignments:

- ◆ Candidates have 8 hours to carry out the assignment. This can be structured in any way that suits your centre's local circumstances, but cannot be exceeded.

- ◆ Candidates can work through practice tasks or activities as a means of assignment preparation (similar to working through past papers ahead of the question paper), but you must ensure that any practice tasks or activities are not designed specifically to inform candidates of the content of the assignment, or to provide them with code that can be used for the assignment.
- ◆ There is no requirement to print evidence single-sided or in colour. However, candidates should check that code in their printouts is legible. This is particularly important if screenshots are pasted into a document, as the code may be too small to read.
- ◆ Ensure candidates understand the evidence required for the task and how to gather it. You should encourage candidates to use the evidence checklist provided, so that all completed work is printed and submitted to SQA.
- ◆ You must not adapt the task in any way that changes the meaning or provides candidates with a structure or support. This includes centre-devised templates that break tasks down into smaller sections and prompt candidates to insert evidence.

## **Advanced Higher**

The following key messages for the Advanced Higher project were highlighted at the Understanding Standards events in September 2019:

- ◆ Ensure candidates use the current, published coursework assessment task.
- ◆ Your role is to facilitate, prompt and question candidates, rather than lead them as they work through their project.
- ◆ You must ensure that each candidate's project meets the criteria of the Advanced Higher project and allows them to access all marks (the checklist on page 20 of the coursework assessment task supports this).
- ◆ You may need to recommend to candidates that they reduce the scope of their project, so that it is achievable.
- ◆ Quality of evidence is important, not quantity.
- ◆ You should encourage candidates to present each stage of the project with suitable headings and annotations to highlight the Advanced Higher concepts that are the focus of assessment, particularly at the design and implementation stages. This will help markers, but it will also help candidates to understand the key aspects of their project and ensure that they are submitting the appropriate evidence.

These points are also highlighted in the 2019 Course Report for Advanced Higher Computing Science, with a view to preparing candidates for the revised project in 2020.

# Information and guidance

## Understanding Standards

### National 5

In November 2019, we are publishing candidate evidence and commentaries from the 2019 National 5 assignment on the [Understanding Standards website](#). This will supplement the existing material from the specimen assignment and the 2018 assignment.

### Higher

We are hosting the following Understanding Standards events for Higher course assessment:

- ◆ 4 November 2019            Dunblane
- ◆ 6 November 2019            Edinburgh
- ◆ 8 November 2019            Glasgow

These events will focus on the Higher course assessment, using candidate evidence from the 2019 diet to exemplify standards for both the question paper and assignment. They also provides a great opportunity for practitioners to come together and network with colleagues, and to have their questions answered by senior SQA appointees. To book a place, please use our online [Event Booking System](#).

## SQA reference language update

Shortly, we will publish an updated guidance document for SQA reference language. This includes further examples of code to support you when preparing candidates for question papers. It also supports our question paper writing teams, by ensuring that reference language within question papers is correct and consistent across levels.

We will provide examples for all constructs within the skills, knowledge and understanding from National 5 to Advanced Higher that can be assessed in the question paper. The document also includes a technical specification which, while not related to assessment, may be of interest.

You do not need to teach candidates to write programs using SQA reference language. Its purpose is to provide a standardised way of presenting code in our question papers. However, you should ensure that candidates can identify how course constructs are presented in SQA reference language, compared to the language they have been working with. You should ensure that you cover this when preparing candidates for the question paper, once you have taught the course content.

## National Progression Awards

There has been an increase in the number of centres delivering National Progression Awards (NPA). In particular:

- ◆ Computer Games Development SCQF level 4, 5 and 6
- ◆ Cyber Security SCQF level 4, 5 and 6

A new NPA in Data Science SCQF level 4, 5 and 6 is now available on our [website](#).

For more information on these, or any other vocational qualifications, please email [computing@sqa.org.uk](mailto:computing@sqa.org.uk)

## SQA computing conference

For many years, SQA has hosted an annual computing conference for vocational qualifications. Historically this was aimed at the college sector, however, in recent years, there has been increased interest in vocational qualifications from the school sector.

In February 2020, we will host a cross-sector computing conference designed to cater for teachers, lecturers and any other groups with an interest in SQA qualifications. The day will predominantly be workshop based, and delegates will be invited to select workshops to suit their role.

If you are in a centre that delivers or is thinking about delivering NPAs, then this is a great opportunity to find out more.

We will notify you when our online [Event Booking System](#) is open to book your place.

## National Qualification Support Team (NQST) membership

The Computing Science NQST is a group of practicing teachers and lecturers who we consult with on an annual basis, to discuss courses and assessments.

If you are interested in joining the team, you can find more information about [National Qualification Support Teams](#) on our website, together with an [application form](#).

## Advanced Higher

### Online resources to help you prepare for Advanced Higher assessment

As part of our Understanding Standards programme, we are providing a range of supportive resources to help you develop your understanding of the standards required in the revised course assessments for Advanced Higher.

This includes:

- ◆ 'Overview of course assessment' audio recording
- ◆ candidate evidence and commentaries for the revised project
- ◆ all workshop materials from events
- ◆ past paper questions — you can use these as they are or with adaptations, to prepare candidates for assessment

We will notify you when these are available. You can access Understanding Standards materials via the 'Understanding Standards' tab on the [subject page](#) of our website.

## **Units that were previously part of the Advanced Higher courses**

The units that were previously part of the Advanced Higher courses are now available as freestanding units at SCQF level 7. These units no longer contribute to the Advanced Higher courses. We have removed references to Advanced Higher courses from the freestanding unit specifications, which are available from the freestanding units web page for each subject. There is a link to the freestanding units page from the 'see also' section on the [subject page](#).

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