



GCE AS A Level Digital Technology

How we developed our approval criteria



Introduction

In December 2018, we published *Delivering Digital*, our review of qualifications, and the qualifications system, in the Information and Communication Technology sector. In the review, we set out a number of actions intended to address the findings of the review. Of these, actions 5 and 6 set out our intentions to develop approval criteria for new GCSE, AS and A level Digital Technology qualifications. Approval criteria are used to determine whether an awarding body's specification and sample assessment materials are compliant with our requirements for qualifications in this subject area.

The specification for the new WJEC GCSE Digital Technology qualification was approved in July 2020, and is scheduled to be taught in schools across Wales from September 2021. We anticipate being able to approve the new AS/A level Digital Technology by September 2021. This will ensure that the specifications and sample assessment materials are available to centres 12 months in advance of first teaching, providing sufficient time for centres and teachers to prepare to deliver the qualification from September 2022.

In this document, we explain how we developed and sought feedback on the approval criteria for the new AS/A level Digital Technology. These are the requirements we set for how the new qualification should be designed and assessed.

Working with the sector

Throughout the development process we have endeavoured to engage with stakeholders as widely and as effectively as possible. We are continually grateful for the support, advice, and guidance that all our stakeholders have offered us, particularly during what has been a very challenging period for the sector. In this section, we provide a brief overview of the ways in which we engaged with stakeholders in order to further refine and develop the approval criteria to ensure that the qualification would be fit for purpose.

Development Days

In March 2019, we held a series of Development Days at venues across Wales for teachers and further education lecturers to share their ideas for the new Digital Technology qualifications. All sessions were well attended and gave attendees a chance to give their views on the proposed aims and objectives, subject content and assessment methods for both the GCSE and AS/A level qualifications.

Digital Technology Qualifications Advisory Group

At the outset of our work to develop the approval criteria, we established the Digital Technology Qualifications Advisory Group (DTQAG) to represent the views of different stakeholders in the sector across Wales. The DTQAG comprises of teacher representatives from each of the regional education consortia, representatives from higher education, further education, employers, and the awarding bodies who expressed an interest in developing the new qualifications. Our sector expert, who has significant experience within the sector, is also a member of this group. During the initial stages of development, the DTQAG took a leading role in determining the aims and objectives for both the GCSE and AS/A level qualifications.

During the latter stages of the approval criteria development process, the DTQAG met regularly in order to test and refine our content and assessment proposals for the AS/A level Digital Technology. This helped ensure that our proposals would result in a qualification that was both fit for purpose and manageable for centres and learners.

Initial engagement with centres

Following the successful development of the GCSE Digital Technology approval criteria in May 2020, we focused on developing an initial outline of the AS/A level Digital Technology approval criteria that included the content suggested by stakeholders. Once we drew together the input we had received into a draft structure, we held a series of follow up structured discussions with teachers and further education lecturers who attended our Development Days, to gather their feedback on the initial outline of the approval criteria.

Survey on practical tasks in AS/A level Digital Technology

As part of our development work for AS/A level Digital Technology, we invited stakeholders to participate in a **survey** to gather their views on the practical tasks that should be available to learners undertaking the qualification. Teachers and lecturers from schools and colleges across Wales took the time to consider our proposals and share their ideas about the types of practical tasks that could be included in the non-examination assessment (NEA) units. In addition, we took this opportunity to update stakeholders, and seek feedback, on the proposed structure and content of the examined units.

Industry and employer engagement

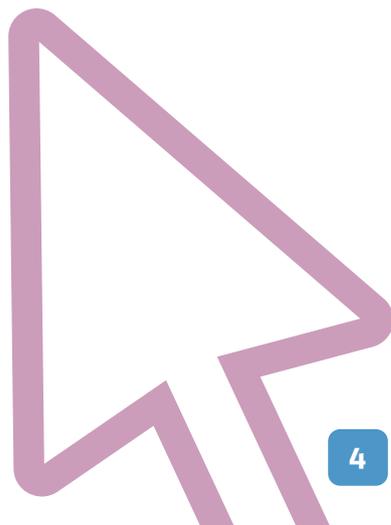
Our sector expert engaged with a range of employers in the creative digital sector, as well as representatives from higher education, to gather feedback on our proposals. This was done to ensure that the tasks outlined in the approval criteria were relevant to industry and higher education and that the skills required to undertake them were likely to support progression to higher education and/or employment.

Awarding body engagement

We invited all recognised awarding bodies to express an interest in working with us to develop requirements for the new Digital Technology qualifications. We then met with the awarding bodies who expressed an interest, and invited them to the DTQAG meetings. Of those awarding bodies, only WJEC have continued to be actively involved in this work throughout the development process.

Final engagement on AS/A level Digital Technology approval criteria

As part of our final phase of engagement work on the approval criteria for the AS/A level Digital Technology, we invited stakeholders to engage with us on an updated version of the approval criteria in October 2020. Stakeholders were provided with two forums through which they could provide feedback. The first being a pair of live webinars which included a summary of our refined proposals for the AS/A level Digital Technology as well as a question-and-answer session. Alongside the webinars, we also launched a **feedback survey** to allow those who wished to communicate their feedback in writing the opportunity to do so.



Summary of our requirements

This section of the document provides an overview of how the input we received from stakeholders helped to shape the approval criteria for the AS/A level Digital Technology. We cover each of the four units separately.

AS Level Unit 1 – Innovation in Digital Technology

The content of Unit 1 is intended to provide both an engaging entry point for learners who are new to Digital Technology, or an extension of areas covered by learners who took the GCSE Digital Technology. It will allow learners to explore a range of engaging topics, such as artificial intelligence, robotics and the life cycles of digital technologies.

The required topics for this unit have a tight focus on the theme of innovation, allowing an awarding body to develop a qualification which covers these areas in depth. This approach was received well by the DTQAG and those who responded to our surveys, who confirmed these topics were engaging and suitable for a qualification at this level.

Our engagement with stakeholders also showed us that the study of relevant legal, social, professional and ethical dimensions was important in developing an understanding of this subject area. Our approval criteria require that these are integrated with other unit topics, where relevant, both to support the manageability of this content and to ensure that it is highly relevant to learners' study.

The majority of respondents to our surveys agreed that the content for this unit is suitable for assessment by examination and, in keeping with the GCSE Digital Technology qualification, we require that it is also assessed on-screen. This approach to examination assessment was supported by stakeholders who responded to our surveys and by our DTQAG.

AS Level Unit 2 – Creative Digital Practices

The content of Unit 2 is designed to allow learners to demonstrate their creative skills, including extending those which learners may have covered in GCSE Digital Technology. We asked stakeholders throughout the development process for their views on the skills that learners should demonstrate in this unit.

Stakeholders told us that they would value a practical task which offered learners the freedom to produce a diverse range of digital products. Our requirement that the practical task requires learners to develop a video game should allow for reliable assessment judgements to be made whilst providing opportunities for learners to create a wide spectrum of outcomes. This requirement should also allow learners to exhibit the vast majority of the skills suggested by stakeholders for a qualification of this type.

A2 Level Unit 3 – Connected Systems

The focus of this unit is to provide learners with the opportunity to develop their knowledge and understanding of contemporary data practices, digital technology networks and cyber security. As with Unit 1, we outline a small range of required topics, which will allow an awarding body to develop detailed content in the specification, and learners to develop a deeper understanding of those topics. Throughout the development process, stakeholders responded positively to the content for Unit 3, noting that the unit included up-to-date and relevant content.

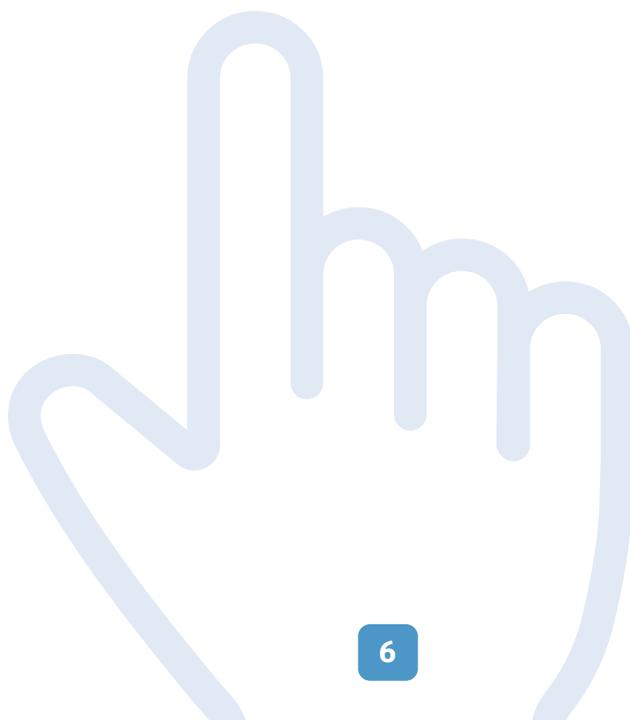
Stakeholders also identified the opportunity for this qualification to support progression into a wide range of subject areas by developing learners' ability to engage with concepts in digital technology through extended responses. This requirement features in our criteria for this unit and also allows learners to demonstrate their progression from AS level.

The majority of respondents to our surveys agreed that the content for this unit is suitable for assessment by on-screen examination.

A2 Level Unit 4 – Digital Solutions

Stakeholders told us that the qualification should aim to develop learners' ability to identify and develop solutions to problems and issues, which is the focus of this unit. We also asked stakeholders about the format such solutions could take, and databases were the most cited response. We continued to engage with stakeholders about this suggestion and found that it could be a suitable basis for this unit and that there were opportunities to incorporate web design into such a task, which was another suggestion that stakeholders offered us. In addition, learners will be required to use relevant project management skills throughout the development of their digital solution, enhancing the validity and currency of this task.

On the question of whether learners should use a brief provided by an awarding body as the basis for this task, our stakeholders were divided. However, a significant portion of responses made compelling arguments about the benefits of the task remaining flexible, to allow for a wide range of candidate responses. Our approval criteria therefore require that learners investigate realistic problems, which allows engagement with real organisations, where appropriate.



Next steps

Any awarding body seeking to offer AS/A level Digital Technology will need to meet the requirements of our approval criteria document. Currently there is one awarding body actively working to develop a new specification. However, other recognised awarding bodies can apply to have their qualifications approved. We aim to approve the new AS/A level Digital Technology by September 2021, in readiness for first teaching in September 2022.

We know that this qualification, like others we have reformed, will require change management and implementation support. When the qualification is developed, we will take a similar approach to that which we took with GCSE Digital Technology and seek to support centres to prepare to deliver this qualification. We will continue to provide updates on our work on the Digital Technology section of our website.

We would like to thank everyone who has engaged in the development of these approval criteria, including those who took the time to provide feedback to our online engagement and attended our webinars. Your ideas, feedback and support throughout this process have helped to ensure that the approval criteria will lead to a qualification that meets the needs of learners, educators, and industry.

