



WJEC GCSE in DIGITAL TECHNOLOGY

APPROVED BY QUALIFICATIONS WALES

DELIVERY GUIDE

Teaching from 2021

This Qualifications Wales regulated qualification is not available to centres in England.

GCSE DIGITAL TECHNOLOGY



WJEC GCSE DIGITAL TECHNOLOGY

Delivery Guide

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AIMS OF THE GUIDANCE FOR TEACHING

The principal aim of the Guidance for Teaching is to support teachers in the delivery of the new **WJEC GCSE Digital Technology** specification and to offer guidance on the requirements of the qualification and the assessment process. The Guidance for Teaching is **not intended as a comprehensive reference**, but as support for professional teachers to develop stimulating and exciting courses tailored to the needs and skills of their own students in their particular institutions.

AIMS OF THE DELIVERY GUIDE

The principal aim of the Delivery Guide is to give an overview of the qualification. It will offer an introduction to the specification, an assessment overview and other guidance that we hope teachers will find useful. Greater information on each unit can be found in the separate unit guides.

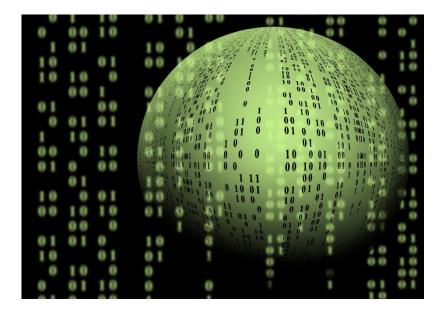


Fig.1

1. SPECIFICATION OVERVIEW

1.1 Aims and objectives

The **WJEC GCSE in Digital Technology** qualification, approved by Qualifications Wales for first teaching from September 2021, is available to:

- all schools and colleges in Wales
- subject to local agreement, it is also available to centres outside Wales, for example in the crown dependencies of the Isle of Man and the Channel Islands, and in British overseas territories, and to British forces schools overseas. It is not available to other overseas centres or in England or Northern Ireland.

It will be awarded for the first time in Summer 2023. using grades A*-G.

The current specification is available here: https://www.wjec.co.uk/qualifications/digital-technology-gcse

The WJEC GCSE qualification in Digital Technology is a broad-based qualification that allows learners to build on the digital skills, knowledge and understanding that is used both in their school and everyday lives. The qualification is designed for learners who wish to begin their journey towards a career that utilises digital technologies or to progress onto advanced level programmes of learning involving digital technologies.

The qualification will allow learners to develop their understanding of the range of digital technology systems at use in our connected and globalised society. It will also allow learners to explore the ever-evolving nature of digital technology systems and how these systems can be used productively, creatively and safely.

This WJEC GCSE specification in Digital Technology will enable learners to:

- become independent, confident and knowledgeable users of existing, new and emerging digital technologies
- develop knowledge of different digital technology systems used across a range of occupational sectors
- understand the impact digital technologies can have on individuals and wider society and the ways in which they can bring about change
- develop skills in organising and analysing data to identify trends and audiences
- become creators of digital products, in a variety of formats and for a variety of purposes, that meet specified, authentic needs
- develop transferable skills in using a range of hardware and software
- develop their understanding of the systems development life cycle and of how ideas can become products.

1.2 Prior learning and progression

There are no previous learning requirements for this qualification. Any requirements set for entry to a course based on the specification are at the school/college's discretion.

This qualification provides a suitable foundation for the study of Digital Technology at either AS or A level.

The qualification provides a coherent, satisfying and worthwhile course of study for learners who do not progress to further study in this subject. In addition, the qualification will help learners make informed decisions about a wide range of career pathways.

1.3 Additional ways that WJEC can offer support:

- sample assessment materials and mark schemes
- exemplar materials for NEA units
- face-to-face and web-based CPD events
- examiners' reports on each question paper
- free access to past question papers and mark schemes via the secure website
- direct access to the subject officer
- Exam results analysis
- Online Examination Review

1.4 Making entries

This is a linear qualification in which all assessments must be taken at the end of the course. Assessment opportunities will be available in the summer series each year, until the end of the life of this specification. Summer 2023 will be the first assessment opportunity.

A qualification may be taken more than once. Candidates must resit all examination units in the same series.

Marks for NEA may be carried forward for the life of the specification. If a candidate resits an NEA unit (rather than carrying forward the previous NEA mark), it is the new mark that will count towards the overall grade, even if it is lower than a previous attempt.

Where a candidate has certificated on two or more previous occasions, the most recent NEA mark is carried forward, regardless of whether that mark is higher or lower (unless that mark is absent). The entry codes appear below:

Title	Entry codes		
The	English-medium	Welsh-medium	
GCSE Digital Technology	3540QS	3540CS	

The current edition of our *Entry Procedures and Coding Information* gives up-to-date entry procedures.

1.5 Summary of assessment

Unit 1: The digital world On-screen examination: 1 hour 30 minutes 40% of qualification	80 marks
	ou marks
An assessment (taken on-screen), comprising of a range of a types to assess specification content related to <i>digital techno</i> systems, the value of digital technology and perspectives on technology.	logy
All questions are compulsory.	
Unit 2: Digital practices Non-exam assessment (NEA): 45 hours 40% of qualification	80 marks
A non-examined assessment comprising of two sections. In Section A candidates will interrogate a supplied data set imported into a spreadsheet in order to inform Section B, where they will create a website incorporating either an animation or a game related to a set context.	
Unit 3: Communicating in the digital world Non-exam assessment (NEA): 15 hours 20% of qualification	60 marks
A non-examined assessment focusing on marketing digital assets using social media. Candidates will create digital assets related to a set context and then formulate an online digital communications campaign around them.	





2. ASSESSMENT OVERVIEW

Detailed teacher guides and exemplar material for each unit are available from the WJEC website here: <u>https://www.wjec.co.uk/qualifications/digital-technology-gcse</u>

2.1 Unit 1

2.1.1 Assessment Arrangements

Unit 1 is an on-screen assessment only unit. WJEC uses the Surpass platform to administer on-screen examinations. We use the Surpass platform to administer on-screen examinations. The examinations themselves run through our free SecureClient software which will need to be installed on each PC at the centre used for delivering the assessment.

Centres are strongly advised to refer to the e-Assessment page of the WJEC website <u>https://www.wjec.co.uk/home/administration/e-assessment/.</u> This will give you full details of how the process works and will link you to the latest information regarding hardware and software requirements.

2.2 Unit 2 and Unit 3

2.2.1 Non – examination assessment arrangements

Unit 2 and Unit 3 are non-exam assessments (NEA) which are internally assessed by the centre and externally moderated by WJEC. The NEA must be conducted in accordance with the JCQ *Instructions for Conducting Non-examination Assessments*, available at <u>www.jcq.org.uk</u>.

Sample contexts for assessment within Unit 2 and Unit 3 are presented in Appendix B of the specification. These are not for use with live assessments.

Contexts will be set annually by WJEC and published on the WJEC secure website. The context will be released each September, from September 2021, and will be accepted for award in the year specified only.

Preparation for NEA

NEA tasks may be completed and assessed at any suitable time during the course.

Centres need to ensure they have delivered the content needed for candidates to be able to access marks allocated to all aspects of the relevant NEA.

Before the course starts, the teacher is responsible for informing candidates of WJEC's regulations concerning malpractice. Candidates must not take part in any unfair practice in the preparation of work for GCSE Digital Technology.

Candidates must understand that information from published sources must be referenced. They should be given guidance on setting out references and be aware that they must not plagiarise other material. They should know that to present material copied directly from books or other sources without acknowledgement will be regarded as deliberate deception. Centres must report suspected malpractice to WJEC.

It is important that NEA activity is monitored by centres to ensure that candidates' work is their own. All candidates are required to sign that the work submitted is their own and teachers are required to confirm that the work is solely that of the candidate concerned and was conducted under the required conditions.

Candidates must not work together during the tasks for Unit 2 or Unit 3.

Time available for NEA

Candidates should spend approximately 45 hours on their NEA task for Unit 2 and 15 hours on their NEA task for Unit 3. These times refer to work completed under direct supervision in the classroom.

Investigative work may be undertaken outside the supervised time and should not be logged as counting towards the times noted above. However, all work, other than investigation, must be completed under direct supervision and counts towards the times noted above.

The NEA tasks do not have a required or recommended length in words or pages.

Supervision and monitoring of NEA

- Once the NEA is underway, candidates' work should remain within the centre at all times and be stored securely between timetabled sessions to mitigate the risks of malpractice taking place.
- Candidates **do not** need to be directly supervised at all times.
- <u>During the NEA</u>, the use of resources, including the Internet, is not tightly prescribed and candidates may have access to such resources. However, the centre **must** ensure that:
 - there is sufficient supervision of every candidate to enable work to be authenticated
 - the work that an individual candidate submits for assessment is their own.
- Investigative work may be completed outside of the centre without direct supervision, provided that the centre is confident that the work produced is the candidate's own. <u>Outside of the centre</u>, candidates may:
 - have unlimited access to electronic and printed resources
 - use the Internet without restriction.
- Teachers may provide guidance and support to candidates to ensure that they have a clear understanding of the requirements of the NEA tasks, the assessment and the associated marking criteria.

- Teachers may advise candidates on the suitability of the context chosen for their NEA work, with regard to the opportunity for the resulting work to address all relevant assessment requirements. Once work is underway, feedback must be limited to general advice on what needs to be improved. Teachers must not provide specific guidance on how to make these improvements.
- 'General advice' in the context of GCSE Digital Technology NEA includes:
 - ensuring that candidates understand the requirements of the relevant task, including the required outcome and the time available
 - ensuring that candidates' routes through the NEA have the potential to meet the requirements of the marking criteria and is of sufficient demand to achieve marks from the highest bands
 - providing guidance on the safe use of the ICT hardware and software available to candidates undertaking NEA activities.
- Within the context of 'general advice' teachers are **not allowed** to:
 - give a candidate detailed advice and take the lead through the NEA process
 - correct or modify a candidate's work
 - give specific direction to a candidate in order to achieve higher marks
 - produce any form of writing frame for use within NEA activities.
- Candidates are allowed access to resources which may include information gathered outside of school/college, e.g. as part of their investigation or research activities.
- During the time candidates are working on their NEA, teachers must monitor progress sufficiently to be able to authenticate the work as the candidate's own (see also the information on authentication below).
- Once the task is finished and the final assessment made, no further amendments may be made.

The time spent working on each NEA task should be recorded by the teacher as a log and this may be requested by WJEC in addition to the work submitted for moderation. The log should be monitored by the centre to ensure that candidates spend 45 hours and 15 hours on their relevant NEA tasks for Unit 2 and Unit 3.

Authentication

It is important that NEA work is rigorously monitored by centres to ensure that candidates' work is their own. Centres should monitor candidates' work by:

- keeping a careful record of progress during the timetabled sessions
- carefully considering whether the written evidence submitted is characteristic of the candidates' ability/attainment
- keeping work secure in the centre once the evidence is handed in
- ensuring work is not returned to the candidate to make changes.

References

References to sources of information used in NEA tasks must be acknowledged. This can be through an appended bibliography using a conventional in-text referencing system, or through footnotes.

Evidence to be submitted

Centres must assure WJEC that the evidence submitted is the work of the candidates concerned. Other than investigation activities, all work must be undertaken under direct supervision.

The teacher responsible for the supervision of the candidate's work must complete a declaration that they are satisfied that the evidence submitted is that of the candidate concerned.

Unit 2 evidence to be submitted

A practical project completed by the candidate, a mark sheet completed by the assessor, signed declarations of authentication (by the teacher and the candidate) submitted electronically using WJEC's online platform.

Unit 3 evidence to be submitted

An online digital communications campaign completed by the candidate, a mark sheet completed by the assessor, signed declarations of authentication (by the teacher and the candidate) submitted electronically using WJEC's online platform.

NEA coversheets must be completed for all candidates (not just those selected for moderation). The forms can be downloaded from WJEC's secure website.

Security of candidates' work

Candidates' work **must** be kept securely between timetabled NEA sessions, and until the deadline for a review of moderation has passed or until a review of moderation or appeal or malpractice investigation has been completed, whichever is the later.

3. COURSE OUTLINE

The following are suggested timings based on the number of guided learning hours and the proportion of marks allocated to each section. The assumption here is that candidates have experience of the software being used. If that is not the case centres should factor that into their teaching time.

3.1 Timings

3.1.2 Unit 1

Unit 1 is the examined unit of the GCSE qualification and is quite extensive. It is recommended that centres spend at least 45 hours teaching this unit.

Please refer to the Unit 1 Guidance for Teaching document for further information.

3.1.3 Unit 2

The Unit 2 NEA is recommended to be taken over 45 hours. Based on the distribution of marks it is suggested that candidates should spend approximately the time shown in the table below for each task:

Section	Marks	Timing
Data organisation and analytics	12	7 hours
Planning – website	11	6 hours
Planning – animation or game	7	4 hours
Developing digital products - assets	10	6 hours
Developing digital products - website	15	8 hours
Developing digital products – animation or game	15	8 hours
Testing completed products	5	3 hours
Evaluating completed products	5	3 hours

Please refer to the Unit 2 Guidance for Teaching document for further information.

3.1.4 Unit 3

The Unit 3 NEA is recommended to be taken over 15 hours. Based on the distribution of marks it is suggested that candidates should spend approximately the time shown in the table below for each task:

Section	Marks	Timing
Forms of online marketing communications	9	2.5 hours
Impact of online marketing communications	6	1.5 hours
Planning digital communications – analysis of audience needs	6	1.5 hours
Planning digital communications – plan digital asset	9	2 hours
Creating digital assets	25	6 hours
Evaluating digital assets	5	1.5 hours

Please refer to the Unit 3 Guidance for Teaching document for further information.

3.2 Approaches

There are a number of different approaches to completing this work that centres may wish to use. The following are suggestions for how this could be done. Consideration could be given to having a mix of these methods.

1. 'Chunking' the work over multiple sessions

This approach would involve setting aside time within the curriculum for candidates and all work would be conducted during these sessions. (Sessions of maybe blocks of 3 hours each week are run over a 10 week period each year).

Advantages of this method

- The task is completed in a defined time period and this may improve manageability in terms of tracking of time
- Skills for different sections can be taught discretely in lessons between test sessions
- Candidates may research as homework in the time between tasks.

Disadvantages of this method

- Requires curriculum rearrangement
- Candidates missing days where test sessions are being conducted will lose significant blocks of time and this will require rearrangement
- Candidates missing teaching sessions between NEA sessions will be underskilled.

2. Running the task in normal lesson sessions

This would involve teaching skills relevant to the task and then switching to NEA conditions once candidates had been taught. For example, teaching the concepts of website design for 30 minutes then all candidates to perform their NEA work for the next 30 minutes once candidates had been taught the concepts required to tackle the task.

The lessons tasks must not be drawn directly from the released task, and only the skills required should be taught prior to commencement of the NEA.

Advantages of this method

- Does not require curriculum rearrangement
- Skills for individual sections can be taught discretely between test sessions
- Candidates may research as homework in the time between tasks.

Disadvantages of this method

- Difficult to track time, as the time candidates are active on the NEA should be tracked in terms of the minutes spent (as the time on task may be a subset of a lesson (e.g. 30 minutes)
- The methodology can result in candidates relying on short term memory which will impact their understanding
- Fragmented delivery will impact candidates being able to see the bigger picture in the development of the project which may result in weaker or disjointed planning, implementation and evaluations.





WJEC RESOURCES 4.

Resources available on the WJEC website: WJEC GCSE Digital Technology website

GCSE Digital Technology Specification

Sample Assessment Materials (online version)

Sample Assessment Materials (paper version)

Guidance for Teaching resources

WJEC Online Exam Review:

WJEC OER website

5. IMPORTANT DATES

First teaching of GCSE Digital Technology	September 2021
First entries for GCSE Digital Technology	February 2023
First examination for GCSE Digital Technology	May/June 2023
First submission of NEA for units 2 and 3	May 2023
First resit for GCSE Digital Technology	May/June 2024
First certification for GCSE Digital Technology	August 2023

KEY CONTACTS 6.

Contact our specialist Subject Officer and administrative support team for digital technology with any queries:

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Acknowledgements

- Fig.1: Image by <u>Gerd Altmann</u> from <u>Pixabay</u>
- Fig. 2: Image by Gerd Altmann from Pixabay
- Fig. 3: Image by <u>Pexels</u> from <u>Pixabay</u>