



# **Qualification Specification for:**

OCN NI Level 2 Award in Digital Construction Skills > Qualification No: 603/6038/0

OCN NI Level 2 Certificate in Digital Construction Skills ➤ Qualification No: 603/6037/9



# **Qualification Regulation Information**

**OCN NI Level 2 Award in Digital Construction Skills** 

Qualification Number: 603/6038/0

**OCN NI Level 2 Certificate in Digital Construction Skills** 

Qualification Number: 603/6037/9

Operational start date: 01 July 2020 Operational end date: 30 June 2025 Certification end date: 30 June 2027

Qualification operational start and end dates indicate the lifecycle of a regulated qualification. The operational end date is the last date by which learners can be registered on a qualification. Learners have up to 2 years after this date to complete the qualification and claim their certificate.

All OCN NI regulated qualifications are published to the Register of Regulated Qualifications (<a href="http://register.ofqual.gov.uk/">http://register.ofqual.gov.uk/</a>). This site shows the qualifications and awarding organisations regulated by CCEA Regulation and Ofqual.

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# **Foreword**

This document explains OCN NI's requirements for the delivery and assessment of the following regulated qualifications:

- → OCN NI Level 2 Award in Digital Construction Skills
- → OCN NI Level 2 Certificate in Digital Construction Skills

This specification sets out:

- Qualification features
- Centre requirements for delivering and assessing the qualifications
- The structure and content of the qualifications
- Unit Details
- Assessment requirements for the qualification
- OCN NI's quality assurance arrangements for the qualifications
- Administration

OCN NI will notify centres in writing of any major changes to this specification. We will also publish changes on our website at <a href="https://www.ocnni.org.uk">www.ocnni.org.uk</a>

This specification is provided online, so the version available on our website is the most up to date publication. It is important to note that copies of the specification that have been downloaded and printed may be different from this authoritative online version.



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# **About Regulation**

#### **OCN NI**

Open College Network Northern Ireland (OCN NI) is a regulated Awarding Organisation based in Northern Ireland. OCN NI is regulated by CCEA Regulation to develop and award professional and technical (vocational) qualifications from Entry Level up to and including Level 5 across all sector areas. In addition, OCN NI is regulated by Ofgual to award similar qualification types in England.

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# The Regulated Qualifications Framework: an overview

The Regulated Qualifications Framework (RQF) was introduced on 1<sup>st</sup> October 2015: the RQF provides a single framework for all regulated qualifications.

#### **Qualification Level**

The level indicates the difficulty and complexity of the knowledge and skills associated with any qualification. There are eight levels (Levels 1-8) supported by three 'entry' levels (Entry 1-3).

#### **Qualification Size**

Size refers to the estimated total amount of time it could typically take to study and be assessed for a qualification. Size is expressed in terms of Total Qualification Time (TQT), and the part of that time typically spent being taught or supervised, rather than studying alone, is known as Guided Learning Hours (GLH).

For further information about the RQF see:

https://www.ocnni.org.uk/blog/regulated-qualifications-framework-rqf/



# **Qualification Features**

# **Sector Subject Area**

5.2 Building and construction

These qualifications relate to the following National Occupational Standards:

### **NOS - Digital Construction Skills**

#### **Qualifications' Aim**

The aim of the OCN NI Level 2 Award and OCN NI Level 2 Certificate in Digital Construction Skills qualifications is to provide an understanding of the implementation of Essential Digital Skills within the construction sector including Building Information Modelling (BIM).

# **Qualifications' Objectives**

The objectives of the OCN NI Level 2 Award and OCN NI Level 2 Award Certificate in Digital Construction Skills qualifications are to provide learners with the knowledge and skills in the following:

- digital construction
- digital skills within construction
- digital security for construction
- digital collaboration within construction
- digital communication within construction

## **Grading**

Grading for these qualifications is pass/fail.

# **Qualification Target Group**

The OCN NI Level 2 Award and OCN NI Level 2 Certificate in Digital Construction Skills qualifications are aimed at learners working within the construction sector and associated supply chains seeking to develop or enhance their digital construction knowledge and workflows.

# **Progression Opportunities**

The OCN NI Level 2 Award in Digital Construction Skills will enable learners to progress to the OCN NI Level 2 Certificate in Digital Construction Skills. Learners will also have the opportunity to progress to other OCN NI Level 3 and OCN NI Level 4 Digital Construction with Building Information Modelling (BIM) and Building Information Modelling qualifications.



# **Entry Requirements**

There are no specific entry requirements for these qualifications, however an understanding and appreciation of the construction sector would be beneficial including construction techniques, reading construction plans/drawing, and project management and delivery. Learners must be at least 16 years of age to take these qualifications.

# **Qualification Support**

A Qualification Support pack is available for OCN NI centres within the login area of the OCN NI website (<a href="https://www.ocnni.org.uk/my-account/">https://www.ocnni.org.uk/my-account/</a>), which includes additional support for teachers, eg planning and assessment templates, guides to best practice, etc.

# **Delivery Languages**

These qualifications are available in English only at this time. If you wish to offer the qualifications in Welsh or Irish (Gaeilge) then please contact OCN NI who will review demand and provide as appropriate.



# **Centre Requirements for Delivering the Qualification**

# **Centre Recognition and Qualification Approval**

New and existing OCN NI recognised centres must apply for and be granted approval to deliver these qualifications prior to the commencement of delivery.

# **Centre Staffing**

Centres are required to have the following roles in place as a minimum, although a member of staff may hold more than one role\*:

- Centre contact
- Programme co-ordinator
- Assessor
- Internal Verifier

\*Note: A person cannot be an internal verifier for any evidence they have assessed.

Centres must ensure that staff delivering, assessing and internally verifying qualifications are both qualified to teach in Northern Ireland and competent to do so.

#### **Tutors**

Tutors delivering the qualification should be occupationally competent, qualified to at least one level higher than the qualification and have a minimum of one year's experience in the construction sector.

#### **Assessors**

The qualifications are assessed within the centre and are subject to OCN NI's quality assurance processes. Units are achieved through internally set, internally assessed, and internally verified evidence.

#### Assessors must:

- be occupationally competent and qualified to at least one level higher than the qualification
- have a minimum of one year's experience in the construction sector
- have direct or related relevant experience in assessment
- assess all assessment tasks and activities



#### **Internal Verification**

OCN NI qualifications must be scrutinised through the centre's internal quality assurance processes as part of the recognised centre agreement with OCN NI. The centre must appoint an experienced and trained internal verifier whose responsibility is to act as the internal quality monitor for the verification of the delivery and assessment of the qualifications.

The centre must agree a working model for internal verification with OCN NI prior to delivery of the qualification.

#### Internal Verifiers must:

- have at least one year's occupational experience in the areas they are internally verifying
- attend OCN NI's internal verifier training if not already completed

# Internal verifiers are required to:

- support tutors and assessors
- sample assessments according to the centre's sampling strategy
- ensure tasks are appropriate to the level being assessed
- maintain up-to-date records supporting the verification of assessment and learner achievement



## **Structure and Content**

## **OCN NI Level 2 Award in Digital Construction Skills**

To achieve the OCN NI Level 2 Award in Digital Construction Skills learners must successfully complete one unit at 3 credits.

Total Qualification Time (TQT) for this qualification: 30 hours Guided Learning Hours (GLH) for this qualification: 24 hours

## OCN NI Level 2 Certificate in Digital Construction Skills

To achieve the OCN NI Level 2 Certificate in Digital Construction Skills learners must successfully complete all five units – 15 credits.

Total Qualification Time (TQT) for this qualification: 150 hours Guided Learning Hours (GLH) for this qualification: 120 hours

Unit Reference Number	OCN NI Unit Code	Unit Title	Credit Value	TQT	GLH	Level
		Optional Units for A	ward			
M/618/2078	CBE902	Digital Construction	3	30	24	Two
<u>T/618/2079</u>	CBE903	Digital Skills within Construction	3	30	24	Two
<u>K/618/2080</u>	CBE904	Digital Security for Construction	3	30	24	Two
M/618/2081	CBE905	Digital Collaboration within Construction	3	30	24	Two
<u>T/618/2082</u>	CBE906	Digital Communication within Construction	3	30	24	Two



# **Unit Details**

Title	Digital Construction	
Level	Two	
Credit Value	3	
Guided Learning Hours (GLH)	24	
OCN NI Unit Code	CBE902	
Unit Reference No	M/618/2078	
Unit purpose and aim(s): This unit will enable the construction and the relevant technology and protection.		
Learning Outcomes	Assessment Criteria	
Understand Digital Construction.      Understand Building Information Modelling (BIM).	<ol> <li>Define what is meant by Digital Construction.</li> <li>Identify at least two benefits of the use of digital technologies within the construction sector.</li> <li>Illustrate the importance of security protocols when working in a digital setting.</li> <li>Describe what is meant by Building Information Modelling (BIM).</li> <li>Define at least five key terms within BIM.</li> <li>Illustrate the maturity stages of BIM implementation.</li> <li>Identify at least three benefits of BIM to the construction sector.</li> </ol>	
Understand technology requirements for Digital Construction.	<ul> <li>3.1. Classify key technology requirements to enable Digital Construction implementation.</li> <li>3.2. Define Common Data Environment (CDE) within the context of Digital Construction.</li> <li>3.3. Illustrate collaborative working methods and protocols within a CDE.</li> </ul>	

#### **Assessment Guidance**

Assessment Method	Definition	Possible Content
Portfolio of evidence	A collection of documents containing work undertaken to be assessed as evidence to meet required skills outcomes OR A collection of documents containing work that shows the learner's progression through the course	Learner notes/written work Learner log/diary Peer notes Record of observation Record of discussion
Practical demonstration/assignment	A practical demonstration of a skill/situation selected by the tutor or by learners, to enable learners to practise and apply skills and knowledge	Record of observation Learner notes/written work Learner log
E-assessment	The use of information technology to assess learners' work	Electronic portfolio E-tests



Title	Digital Skills within Construction
Level	Two
Credit Value	3
Guided Learning Hours (GLH)	24
OCN NI Unit Code	CBE903
Unit Reference No	T/618/2079

*Unit purpose and aim(s):* This unit will enable the learner to develop an understanding of the use of Digital Skills for construction sites.

Lea	arning Outcomes	Assessment Criteria
1.	Understand how to use digital skills and devices in construction.	<ul> <li>1.1. Define cloud-based storage and how portable devices may be used to access and exchange information.</li> <li>1.2. Illustrate how the use of digital skills and devices may improve access to construction information.</li> <li>1.3. Illustrate the process of structured file management.</li> <li>1.4. Illustrate the Health and Safety considerations for the use of digital devices on a construction site.</li> </ul>
2.	Understand the use of Building Information Modelling (BIM) and digital skills across the construction supply chain and how it may improve project management.	Illustrate how the use of BIM and digital skills may improve coordination across the construction supply chain.      Illustrate the use of BIM for improvement of construction project management.
3.	Know how to use digital design review tools to access and evaluate a BIM model.	3.1. Illustrate the use of digital design review tools to access and evaluate a BIM model.

### **Assessment Guidance**

Assessment Method	Definition	Possible Content
Portfolio of evidence	A collection of documents containing work undertaken to be assessed as evidence to meet required skills outcomes OR A collection of documents containing work that shows the learner's progression through the course	Learner notes/written work Learner log/diary Peer notes Record of observation Record of discussion
Practical demonstration/assignment	A practical demonstration of a skill/situation selected by the tutor or by learners, to enable learners to practise and apply skills and knowledge	Record of observation Learner notes/written work Learner log
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Title	Digital Security for Construction
Level	Two
Credit Value	3
Guided Learning Hours (GLH)	24
OCN NI Unit Code	CBE904
Unit Reference No	K/618/2080

Unit purpose and aim(s): This unit will enable the learner to develop a fundamental understanding of the information management and security requirements for working within digital construction.

the information management and security requirements for working within digital construction.			
Learning Outcomes		Assessment Criteria	
1.	Understand the need for security when working and sharing information within a digital platform in construction.	<ul> <li>1.1. Identify online risks and threats, including their impact and how they may be managed.</li> <li>1.2. Illustrate where information may be stored and describe methods to protect data and devices,</li> <li>1.3. Describe the use of wireless networks and associated security risks.</li> </ul>	
2.	Understand construction industry requirements for the exchange of data.	<ul> <li>2.1. Describe the construction industry security management process associated with Building Information Modelling (BIM) and the Exchange Information Requirements (EIR).</li> <li>2.2. Illustrate standards for the establishment of a common data environment, including processes, procedures and security.</li> </ul>	
3.	Understand how to apply appropriate construction industry security measures.	3.1. Identify suitable construction industry security measures and procedures associated with people, process, physical and technical security.  3.2. Illustrate construction industry security backup procedures.	

#### **Assessment Guidance**

Assessment Method	Definition	Possible Content
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Practical demonstration/assignment	A practical demonstration of a skill/situation selected by the tutor or by learners, to enable learners to practise and apply skills and knowledge	Record of observation Learner notes/written work Learner log
E-assessment	The use of information technology to assess learners' work	Electronic portfolio E-tests



Title	Digital Collaboration within Construction	
Level	Two	
Credit Value	3	
Guided Learning Hours (GLH)	24	
OCN NI Unit Code	CBE905	
Unit Reference No	M/618/2081	
Unit purpose and aim(s): This unit will enable the digital collaboration within construction and how it	learner to develop a fundamental understanding of may minimise inefficiency.	
Learning Outcomes	Assessment Criteria	
Understand the traditional delivery processes within the construction sector and how advances in digital processes may improve efficiency.	<ul> <li>1.1. Describe traditional project delivery methods identifying their inefficiencies in sharing of information.</li> <li>1.2. Identify how the advancement of digital construction processes may improve efficiency.</li> </ul>	
Understand Common Date Environment (CDE).	Describe the use of a common data environment, including:     a) processes and procedures for sharing information     b) data security	
Understand how to use digital technologies for collaboration.	3.1. Illustrate how cloud and application-based collaborative tools may be used to enhance team communication and information management.	

### **Assessment Guidance**

Assessment Method	Definition	Possible Content
Portfolio of evidence	A collection of documents containing work undertaken to be assessed as evidence to meet required skills outcomes OR A collection of documents containing work that shows the learner's progression through the course	Learner notes/written work Learner log/diary Peer notes Record of observation Record of discussion
Practical demonstration/assignment	A practical demonstration of a skill/situation selected by the tutor or by learners, to enable learners to practise and apply skills and knowledge	Record of observation Learner notes/written work Learner log
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T4itle   Digital Communication within Construction		
Level	Two	
Credit Value	3	
Guided Learning Hours (GLH)	24	
OCN NI Unit Code	CBE906	
Unit Reference No	T/618/2082	
Unit purpose and aim(s): This unit will enable the learner to develop an understanding of Digital		

Communication skills within digital construction.			
Learning Outcomes		Assessment Criteria	
1.	Understand how digital communication may be used for information exchange within construction.	<ol> <li>1.1. Describe the importance of collating accurate information during the design and construction stage.</li> <li>1.2. Identify at least three forms of appropriate modes of online communication for sharing information relevant within construction.</li> <li>1.3. Illustrate how digital technologies may be used to achieve information exchanges within construction.</li> </ol>	
2.	Understand the use of digital information exchange tools in digital construction.	<ul> <li>2.1. Identify at least three digital information exchange modes in digital construction.</li> <li>2.2. Identify the technical requirements associated with data management.</li> <li>2.3. Summarise the importance of information exchange standards in digital construction.</li> </ul>	
3.	Understand construction industry requirements for the capture and exchange of data.	<ul> <li>3.1. Illustrate the use of a common data environment, including structure, processes, procedures and security.</li> <li>3.2. Describe how digital technologies may be used to capture and communicate information within the construction industry.</li> </ul>	

# **Assessment Guidance**

Assessment Method	Definition	Possible Content
Portfolio of evidence	A collection of documents containing work undertaken to be assessed as evidence to meet required skills outcomes OR A collection of documents containing work that shows the learner's progression through the course	Learner notes/written work Learner log/diary Peer notes Record of observation Record of discussion
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# **Quality Assurance of Centre Performance**

#### **External Verification**

All OCN NI recognised centres are subject to External Verification. External verification visits and monitoring activities will be conducted annually to confirm continued compliance with the conditions of recognition, review the centre's risk rating for the qualification and to assure OCN NI of the maintenance of the integrity of the qualification.

The External Verifier will review the delivery and assessment of this qualification. This will include the review of a sample of assessment evidence and evidence of the internal verification of assessment and assessment decisions. This will form the basis of the External Verification report and will inform OCN NI's annual assessment of centre compliance and risk. The External Verifier is appointed by OCN NI.

#### **Standardisation**

As a process, standardisation is designed to ensure consistency and promote good practice in understanding and the application of standards. Standardisation events:

- make qualified statements about the level of consistency in assessment across centres delivering a qualification
- make statements on the standard of evidence that is required to meet the assessment criteria for units in a qualification
- make recommendations on assessment practice
- produce advice and guidance for the assessment of units
- identify good practice in assessment and internal verification

Centres offering units of an OCN NI qualification must attend and contribute assessment materials and learner evidence for standardisation events if requested.

OCN NI will notify centres of the nature of sample evidence required for standardisation events (this will include assessment materials, learner evidence and relevant assessor and internal verifier documentation). OCN NI will make standardisation summary reports available and correspond directly with centres regarding event outcomes.



### **Administration**

# Registration

A centre must register learners within 20 working days of commencement of a qualification.

#### Certification

Certificates will be issued to centres within 20 working days of receipt of correctly completed results marksheets. It is the responsibility of the centre to ensure that certificates received from OCN NI are held securely and distributed to learners promptly and securely.

# **Charges**

OCN NI publishes all up to date qualification fees in its Fees and Invoicing Policy document. Further information can be found on the centre login area of the OCN NI website.

# **Equality, Fairness and Inclusion**

OCN NI has considered the requirements of equalities legislation in developing the specification for these qualifications. For further information and guidance relating to access to fair assessment and the OCN NI Reasonable Adjustments and Special Considerations policies, centres should refer to the OCN NI website.

### **Retention of Evidence**

OCN NI has published guidance for centres on the retention of evidence. Details are provided in the OCN NI Centre Handbook and can be accessed via the OCN NI website.



**OCN NI Level 2 Award in Digital Construction Skills** 

**Qualification Number: 603/6038/0** 

**OCN NI Level 2 Certificate in Digital Construction Skills** 

Qualification Number: 603/6037/9

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