Qualification Specification:

OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions

- **Qualification No: 610/5285/1**

Version: 1.0

1. Specification Updates

Key changes have been listed below:

Section	Detail of change	Version and date of Issue

2. Contents

3. Introduction to Open College Network Northern Ireland (OCN NI)

The Open College Network Northern Ireland (OCN NI) is a UK recognised awarding organisation based in Northern Ireland. We are regulated by CCEA Regulation to develop and award regulated professional and technical (vocational) qualifications from Entry Level up to and including Level 5 across all sector areas. In addition, OCN NI is also regulated by Ofqual to award qualifications in England.

OCN NI is also an educational charity that advances education by developing nationally recognised qualifications and recognising the achievements of learners. We work with centres such as Further Education Colleges, Private Training Organisations, Voluntary and Community Organisations, Schools, SME's and Public Sector bodies to provide learners with opportunities to progress into further learning and/or employment. OCN NI's Strategic Plan can be found on the OCN NI website www.ocnni.org.uk.

For further information on OCN NI qualifications or to contact us, you can visit our website at www.ocnni.org.uk. The website should provide you with details about our qualifications, courses, contact information, and any other relevant information you may need.

OCN NI Contact Details

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4. About this Specification

This specification details OCN NI's specific requirements for the delivery and assessment of the **OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions.**

This specification will provide guidelines for centres to ensure the effective and correct delivery of this qualification. OCN NI qualification specifications are based on research and engagement with the practitioner community to ensure they provide appropriate skills and knowledge for learners.

The qualification specification will detail the following aspects of the OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions.

- **Qualification Features**: this includes the key characteristics and features of this qualification, such as its intended audience, purpose, and credit value.

- **Centre Requirements:** this details the prerequisites and obligations that centres must fulfil to be eligible to deliver and assess this qualification. These include guidelines on staff qualifications, resources, and required procedures.

- **Structure and Content:** this details the structure and content of the qualification including units, and any specific content that learners will be required to study.

- **Assessment Requirements:** this details assessment criteria and assessment methods for this qualification, ensuring that summative assessment approaches are clear.

- **Quality Assurance:** the quality and consistency of delivery and assessment of this qualification are of paramount importance to OCN NI. The mandatory quality assurance arrangements including processes for internal and external verification that all centres offering this qualification must adhere to are detailed.

- **Administration:** guidance on the administrative aspects of delivering this qualification, including registration, certification, and record-keeping.

- Reference to other handbooks and policies as appropriate to the qualification.

It is important to note that OCN NI will communicate any significant updates or changes to this specification in writing to our centres. Additionally, we will make these changes available on our official website at www.ocnni.org.uk.

To stay current, please refer to the online version of this specification as it is the most authoritative and up-to-date publication. Be aware that downloaded and printed copies may not reflect the latest revisions.

4.1 Additional Support

OCN NI offers a comprehensive range of support services designed to assist centres in meeting the delivery and quality assurance requirements of OCN NI qualifications. These services include:

- **Learner Assessment Booklets**: These booklets are created to assist learners in demonstrating the fulfilment of assessment criteria and organising the quality assurance prerequisites for each individual unit.

- **Qualification Support Pack**: A support pack has been developed to support centres in the delivery of this qualification. The pack includes planning and assessment templates, guides to best practice, etc.

- **Professional Development for Educators**: OCN NI provides opportunities for professional development tailored to meet the various needs of practitioners and quality assurance staff. Centres can join our training sessions, available in both face-to-face and online formats, or explore a wealth of training materials by visiting www.ocnni.org.uk

- **OCN NI Subject Advisors**: Our team of subject advisors offers vital information and support to centres. They provide guidance on specification details, non-exam assessment advice, updates on resource developments, and various training opportunities. They actively engage with subject communities through an array of networks to facilitate the exchange of ideas and expertise, to support practitioners to provide quality education programs to learners.

All centres can access information, support and guidance to support the delivery and quality assurance of this qualification by contacting their designated Business Development Advisor or by contacting us on Contact Us | OCN NI

5. About this Qualification

5.1 Qualification Regulation Information

OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions
Qualification Number: 610/5285/1

Operational start date: 15 January 2025
Operational end date: 14 January 2030
Certification end date: 14 January 2035

The qualification's operational start and end dates define the regulated qualification's lifecycle. The operational end date is the final date for learner registration, while learners have until the certificate end date to complete the qualifications and receive their certificates.

It is important to note that all OCN NI regulated qualifications are listed on the Register of Regulated Qualifications (RQF), which can be found at Ofqual Register. This register is maintained by Ofqual in England and CCEA Regulation in Northern Ireland. It contains information about qualifications that are regulated and accredited. It is a key resource for learners, employers, and educational institutions to verify the status and recognition of qualifications.

Centres must adhere to administrative guidelines diligently, with special attention to the fact that fees, registration, and certification end dates for the qualification may be subject to changes. It is a centre's responsibility to make itself aware of updates on any modifications to ensure compliance with the latest requirements. OCN NI provides centres with timely updates through various channels including website, newsletters and through this specification. Information on qualification fees can be found on the Centre Login section of the OCN NI website www.ocnni.org.uk .

5.2 Sector Subject Area

A subject sector area is a specific category used to classify academic and vocational qualifications. Subject sector areas are part of the educational and qualifications framework to organise and categorise qualifications. The sector subject for this qualification is:

6.1 ICT for practitioners (see unit for NOS mapping)

5.3 Qualification Aim and Objectives

Qualification Aim

The OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions will enable the learner to gain skills in cloud-based computing, specifically in the areas of machine learning and managing and securing computer networks to provide services.

Qualification's Objectives

The objectives of the OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions are to enable learners to gain skills and knowledge to:

- train and validate cloud-based machine learning models using both automated and manual processes
- train and validate cloud-based computer vision machine learning models
- select and test cloud-based natural language processing solutions

5.4 Target Learners

The qualification is targeted at both existing IT learners and individuals working in IT who wish to develop skills in cloud-based computing.

The qualification has been designed for:

- learners aiming to advance to further or higher education in the field of information technology
- learners seeking entry into employment in the field of information technology

5.5 Entry Requirements

In order to take this qualification learners must be at least 18 years old and have a level 4 qualification.

5.6 Progression

Progression from the OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions is to other higher level education qualifications in information technology or into relevant employment.

5.7 Delivery Language

This qualification is exclusively available in English. If there is a desire to offer this qualification in Welsh or Irish (Gaeilge), we encourage you to get in touch with OCN NI. They will assess the demand for such provisions and, if feasible, provide the qualification in the requested language as appropriate.

6. Centre Requirements for Delivering this qualification

6.1 Centre Recognition

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

6.2 Qualification Approval

Once a centre has successfully undergone the Centre Recognition process, it becomes eligible to apply for qualification approval. The centre's capability to meet and sustain the qualification criteria will be assessed. Throughout the qualification approval process, OCN NI will aim to ensure that:

- centres possess suitable physical resources (e.g., equipment, IT, learning materials, teaching rooms) to support qualification delivery and assessment
- centre staff involved in the assessment process have relevant expertise and/or occupational experience
- robust systems are in place for ensuring ongoing professional development for staff delivering the qualification
- centres have appropriate health and safety policies concerning learner equipment use
- qualification delivery by centres complies with current equality and diversity legislation and regulations
- as a part of the assessment process for this qualification, learners should have access to a practical work setting

6.3 Centre Staffing

To offer this qualification centres are mandated to establish the following roles as a minimum, although a single staff member may serve in more than one capacity*:

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

*Note: An individual cannot serve as an Internal Verifier for their own assessments.

6.4 Tutor Requirements

Tutors responsible for delivering this qualification are expected to possess a high degree of occupational competency. They should meet the following criteria:

- **Occupational Competency:** Tutors should demonstrate a clear understanding of the subject matter, including up-to-date knowledge of the information technology industry. This competence should enable them to effectively impart knowledge and practical skills to learners.

- **Qualifications:** Tutors should hold qualifications at a level that is at least one level higher than the qualification they are teaching. This ensures that they have the necessary academic foundation to provide in-depth guidance and support to learners.

- **Relevant Industry Experience:** In addition to academic qualifications, tutors must have a minimum of three years of relevant, hands-on experience in the information technology industry.

These requirements collectively ensure that learners receive instruction from highly qualified and experienced instructors, thereby enhancing the quality and effectiveness of their educational experience in the information technology field.

6.5 Assessor Requirements

The assessment of this qualification takes place within the centre and is subjected to OCN NI's rigorous quality assurance procedures. The achievement of individual units is based on the criteria defined in each unit.

Assessors play a pivotal role in ensuring the validity and fairness of assessments. They are required to meet the following criteria:

- **Occupational Competency:** Assessors should possess a high degree of occupational competency in the relevant subject matter. This expertise enables them to accurately evaluate and measure a learner's knowledge and skills. Additionally, they should hold qualifications at a level that is at least one level higher than the qualification they are assessing, ensuring their in-depth understanding of the subject matter.

- **Relevant Industry Experience:** A minimum of three years of practical experience in the information technology industry is a prerequisite. This practical background is essential for assessors to effectively evaluate a learner's capabilities in real-world contexts.

- **Assessment Expertise:** Assessors should have direct or related experience in the field of assessment. This includes knowledge of best practices in designing, conducting, and grading assessments. Their expertise ensures that assessments are both fair and valid.

- **Assessors Qualification:** Assessors should hold or be currently undertaking a recognised assessor's qualification; or must have attended the OCN NI Assessment Training.

- **Comprehensive Assessment Oversight:** Assessors are responsible for evaluating all assessment tasks and activities comprehensively. They must thoroughly review and assess each element to ensure a fair and accurate representation of a learner's skills and knowledge.

These rigorous requirements uphold the quality and integrity of the qualification's assessment process, ensuring that learners receive a fair and reliable evaluation of their information technology competencies.

6.6 Internal Verifier Requirements

The Internal Verifier plays a crucial role in the centre's internal quality assurance processes. The centre must designate a skilled and trained Internal Verifier who assumes the role of an internal quality monitor responsible for verifying the delivery and assessment of the qualifications.

The Internal Verifier for this qualification must meet the following criteria:

- **Relevant Industry Experience:** A minimum of three years of practical experience in the information technology industry is a prerequisite. This practical background is essential for internal verifiers to effectively evaluate a learner's capabilities in real-world contexts.
- **Internal Verification Expertise:** Internal Verifiers should have direct or related experience in the field of verification. This includes knowledge of best practices in designing, conducting, and grading assessments. Their expertise ensures that assessments are both fair and valid.
- **Internal Verifiers Qualification:** Internal Verifiers should hold or be currently undertaking a recognised Internal Verifier's qualification; or must have attended the OCN NI Internal Verification Training.
- **Thorough Evaluation of Assessment Tasks and Activities:** Internal verifiers are tasked with conducting in-depth reviews and assessments of all assessment tasks and activities. Their responsibility is to ensure a comprehensive and meticulous oversight of each element to guarantee a just and precise reflection of a learner's abilities and knowledge and to ensure that all assessment and quality assurance requirements are fulfilled.

7. Qualification Structure

7.1 Qualification Purpose

The OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions is a unitised qualification on a scale of pass or fail. Learners are expected to demonstrate a comprehensive understanding of the subject matter, ensuring a level of proficiency. This qualification will enable learners to acquire practical skills in cloud-based computing, specifically in the areas of machine learning and implementing and securing computer networks, equipping learners with the capabilities required for employment in the sector.

7.2 Qualification Level

In the context of the OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions it is essential to understand the significance of qualification levels, as they play a pivotal role in assessing the depth and complexity of knowledge and skills required for successful attainment. This qualification aligns with Level 5, which signifies an advanced level of difficulty and intricacy. It's important to note that qualification levels in the educational framework range from Level 1 to Level 8, complemented by three 'entry' levels, namely Entry 1 to Entry 3.

7.3 Qualification Size

Total Qualification Time (TQT)

This represents the total amount of time a learner is expected to spend to complete the qualification successfully. It includes both guided learning hours (GLH) and independent study or additional learning time.

Guided Learning Hours (GLH)

These are the hours of guided instruction and teaching provided to learners. This may include classroom instruction, tutorials, or other forms of structured learning.

OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions	
Total Qualification Time (TQT):	150 hours
Total Credits Required:	15 credits
Guided Learning Hours (GLH):	84 hours

7.4 How to Achieve the Qualification

To achieve the OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions learners must complete one unit - 15 credits.

8. Assessment Structure

This qualification is assessed through internal assessment and each unit is accompanied by specific assessment criteria that define the requirements for achievement.

8.1 Assessment Guidance: Portfolio

The portfolio for this qualification is designed to provide a comprehensive view of a learner's skills and knowledge. It is a holistic collection of evidence that may include a single piece of evidence that satisfies multiple assessment criteria. There is no requirement for learners to maintain separate evidence for each assessment criterion.

When learners are creating their portfolio, they should refer to the assessment criteria to understand the evidence required. Explanations of command words/verbs used in the assessment criteria can be found in Appendix 1 of this document.

It is essential that the evidence in the portfolio reflects the application of skills in real-world situations. Learners should ensure that they provide multiple examples or references whenever the assessment criteria require it.

When demonstrating knowledge, learners can draw from their own organisation or another organisation they are familiar with to provide context.

8.2 Understanding the Units

The units outlined in this specification establish clear assessment expectations. They serve as a valuable guide for conducting assessments and ensuring quality assurance efficiently. Each unit within this specification follows a consistent structure. This section explains the operational framework of these units. It is imperative that all educators, assessors, Internal Verifiers, and other personnel overseeing the qualification review and familiarise themselves with this section to ensure a comprehensive understanding of how these units function.

- **Title:** The title will reflect the content of the unit and should be clear and concise.
- **Level:** A unit can have one of six RQF levels: Entry, One, Two, Three, Four or Five. All units within this qualification are level 5.
- **Credit Value:** This describes the number of credits ascribed to a unit. It identifies the number of credits a learner is awarded upon successful achievement of the unit. One credit is awarded for the learning outcomes which a learner, on average, might reasonably be expected to achieve in a notional 10 hours of learning.
- **Learning Outcome:** A coherent set of measurable achievements.
- **Assessment Criteria:** These enable a judgement to be made about whether or not, and how well, the students have achieved the learning outcomes.
- **Assessment Guidance and Methods:** These detail the different assessment methods within the unit that may be used.
- **Teaching Content:** This provides indicative content to assist in teaching and learning.

9. Qualification Summary by Unit

OCN NI Level 5 Certificate in Developing Cloud-Based Machine Learning Solutions
Total Qualification Time (TQT) for this qualification: 150 hours
Guided Learning Hours (GLH) for this qualification: 84 hours

To achieve this qualification learners must successfully complete the one unit - 15 credits.

Unit Reference Number	OCN NI Unit Code	Unit Title	Credit Value	GLH	Level
L/651/4377	CBG694	Developing Cloud-Based Machine Learning Solutions	15	84	Five

10. Unit Content

Title	Developing Cloud-Based Machine Learning Solutions
Level	Five
Credit Value	15
Guided Learning Hours (GLH)	84
OCN NI Unit Code	CBG694
Unit Reference No	L/651/4377
Learn Direct Code	CL4
Unit purpose and aim(s): This unit will enable the learner to understand how to develop cloud hosted machine learning solution to address industry problems.	

Learning Outcomes	Assessment Criteria
1. Understand factors to be taken into account when developing machine learning solutions.	1.1. Explain the processes involved which enable machine learning to occur. 1.2. Evaluate workloads involved in the following: a) machine Learning b) anomaly detection c) computer vision d) natural language processing e) knowledge mining 1.3. Evaluate how the principles of responsible machine learning development are applied with reference to: a) fairness b) reliability and safety c) privacy and security d) transparency e) accountability 1.4. Research types of machine learning including: a) supervised including regression and classification b) unsupervised including clustering
2. Be able to train and validate cloud-based machine learning models using both manual and automated processes.	2.1. Explain and use an industry standard training and validation process to manually develop a cloud-based machine learning model. 2.2. Explain and use an automated machine learning application to develop a cloud-based machine learning model.
3. Be able to train and validate cloud-based computer vision machine learning models.	3.1. Explain the following applications in relation to cloud-based computer vision machine learning models: a) image classification b) object detection c) semantic segmentation d) image analysis e) facial detection and recognition f) optical character recognition 3.2. Use cloud-based computer services to perform image analysis including: a) analysing images using description and tagging b) detecting object, brands and faces c) detecting domain specific content

	3.3. Explain and demonstrate how to train and validate a cloud-based computer vision machine learning model to perform two of the following: a) facial detection, analysis and recognition b) image classification c) object recognition d) optical character recognition (OCR)
4. Be able to select and test a cloud-based natural language processing solution for a given application.	4.1. Explain what is meant by natural language processing (NLP) with reference to the following: a) common NLP tasks b) conversational artificial intelligence c) NLP in the Cloud 4.2. Analyse how the following impacts on NLP in the cloud: a) speech recognition b) speech synthesis c) translation including literal and semantic. d) text and speech e) conversational language including utterance, entities and intent 4.3. Determine the appropriate natural language processing solution for a given application. 4.4. Configure and test a ChatBot to provide a cloud-based natural language processing solution to a given industry problem.

Additional assessment advice:
The machine models produced in learning outcome 2 will not be either a computer vision or natural language model as these are addressed specifically in learning outcomes 3 and 4.

NOS:
URN: TECIS805401 - Develop and implement machine learning algorithms
URN: TECIS804401 - Manage the deployment of artificial intelligence solutions
Assessment Guidance

The following assessment method/s may be used to ensure all learning outcomes and assessment criteria are fully covered.

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
Coursework	Research or projects that count towards a learner's final outcome and	Record of observation Learner notes/written work Tutor notes/record

	demonstrate the skills and/or knowledge gained throughout the course	Learner log/diary
E-assessment	The use of information technology to assess learners' work	Electronic portfolio E-tests

Learning Outcome	Unit Content
1. Understand factors to be taken into account when developing machine learning solutions.	**Scope** Teaching will cover: Understanding difference between artificial intelligence and machine learning: Understanding the processes that enable machine learning to occur including data collection, preprocessing, feature extraction, model training, evaluation, and tuning enable machine learning to learn patterns and make predictions. Understanding how to calculate workloads for three of the following artificial intelligence applications: • machine learning • anomaly detection • computer vision • natural language processing • knowledge mining Understanding how the following principles of responsible machine learning are applied when developing machine learning solutions to industry problems: • fairness • reliability and safety • privacy and security • transparency • accountability Understanding types of machine learning: • supervised, including regression and classification • unsupervised; including clustering
2. Be able to train and validate cloud-based machine learning models using both manual and automated processes.	**Scope** Teaching will cover: Understanding industry standard processes for training and validating machine learning models including: • Setting up of cloud environment and data: configuring cloud resources (e.g., compute, storage) and uploading/preprocessing the dataset • training the model: using cloud-based tools to train the model, leveraging scalable infrastructure for large datasets or complex algorithms • validating and optimising: evaluating model performance using validation datasets, fine-tuning hyperparameters, and iteration to improve results • testing the model: running the trained model on a test dataset to assess its accuracy and robustness using appropriate metrics • deploying and monitoring: deploying the model as a cloud service, then monitoring its performance and updating as needed to ensure it meets production requirements.

	Understanding industry standard processes for training and validating machine learning models using automated applications including: • uploading data and defining objectives: providing the dataset to the automated machine learning platform and specifying the target variable and objectives. • automated preprocessing: allowing the platform to handle data cleaning, transformation, feature engineering, and splitting. • model selection and training: the application automatically selects, trains, and fine-tunes multiple models using scalable cloud infrastructure • validation and evaluation: reviewing the platform-generated validation metrics, model comparisons, and test set evaluations. • deploying and monitoring: deploying the best-performing model via the platform's APIs or services and monitoring its performance with built-in analytics.
3. Be able to train and validate cloud-based computer vision machine learning models.	**Scope** Teaching will cover: Understanding computer vision through the use of the following applications. • image classification • object detection • semantic segmentation • image analysis • facial detection and recognition • optical character recognition (OCR) Understanding cloud-based computer vision services and their applications in developing computer vision machine learning models including: • The Computer Vision Service • Custom Vision • Face • Form Recognizer Understanding resources associated with Custom Vision Services including cognitive services, model training and evaluate to perform image classification and object detection. Understanding Optical character recognition (OCR) using: • computer vision to read text • the OCR API • the Read API • analysing forms • pre-built receipt models
4. Be able to select and test a cloud-based natural language processing solution for a given application.	**Scope** Teaching will cover: Understanding what is meant by Natural Language Processing (NLP) including: • common NLP tasks • conversational artificial intelligence-based applications • NLP in the cloud Understanding cloud-based NLP applications for analysing text and text analysis techniques.

	Understanding speech recognition and synthesis using: • speech recognition • speech synthesis • translation including literal and semantic. • text and speech Understanding conversational language including: • utterances • entities • intents • training and predicting Understanding of the testing and utilisation of a knowledge base using Bot creation and configuration.

11. Quality Assurance of Centre Performance

11.1 Internal Assessment

When delivering and assessing this qualification, centres must align with stakeholders' expectations and address learners' needs by implementing a practical and applied programme. Centres have the flexibility to customise programmes to meet local requirements and establish connections with local employers and the broader vocational sector.

The Assessor should work with the Internal Verifier to ensure that the assessment is planned in line with OCN NI requirements. Assessment Plans must be developed and approved by the Internal Verifier prior to the delivery of the qualification.

All units within this qualification must undergo internal assessment. Learners must provide evidence that they have appropriately met all assessment criteria required for that grade.

The assessment format for all units involves a task conducted after the delivery of the unit's content, or part of it, if multiple tasks are used. Tasks may exhibit in various forms, encompassing practical and written types. Please refer to 'OCN NI's Assessment Definitions Guide' for additional details.

A task constitutes a distinct activity completed independently by learners, separated from teaching, practice, exploration, and other activities guided by tutors. Tasks are assigned to learners with a specified start date, completion date, and explicit requirements for the evidence to be produced. Some tasks may include observed practical components and require diverse forms of evidence.

A valid assignment will enable a clear and formal assessment outcome, which meets the requirements of the assessment criteria. Assessment decisions are based on the specific assessment criteria given in each unit and set at each grade level. The way in which individual units are written provides a balance of assessment of understanding, practical skills and vocational attributes appropriate to the purpose of qualifications.

It is the Assessor's role to ensure that learners are appropriately prepared for assessment, this begins from induction onwards. Assessors should ensure that learners understand how assessment tasks are used to determine the award of credit, the importance of meeting assessment timelines, and that all learners work must be independently created, where source documents are used this should be appropriately referenced, learners should be aware of what would constitute plagiarism and the possible consequences.

When conducting the assessment, Assessors must ensure they do not provide direct input, instructions or specific feedback which may compromise the authenticity of the work submitted.

Once the Assessor has authenticated the learners work, they must transparently demonstrate the rationale behind their assessment decisions. Once a learner completes all assigned tasks for a unit, the Assessor will allocate a grade for the unit. Refer to the 'Unit Grading Matrix' for additional information on the grading process.

Once the Assessor has completed the assessment process for the task, the assessment decision is recorded formally, and feedback is provided to the learner. The feedback should show the learner the outcome of the assessment decision, how it was determined or where the criteria has been met, it may indicate to the learner why achievement of the assessment criteria has not been met. It must be clear to the learner that this Assessment outcome is subject to verification.

For further information on assessment practice, please see the 'OCN NI Centre Handbook'. Assessment Training is also available and can be booked through the OCN NI Website.

11.2 Internal Verification

The role of the Internal Verifier is to ensure appropriate internal quality assurance processes are carried out. The Internal Verifier must oversee that assessments are conducted in accordance with relevant OCN NI policies, regulations, and this specification.

The Internal Verifier must ensure assessments are fair, reliable, and uniform, thereby providing a consistent standard for all learners.

Internal Verifiers are required to provide constructive feedback to Assessors, identifying areas of strength and those that may require improvement. This feedback contributes to the ongoing professional development of Assessors.

Contributing to the standardisation of assessment practices within the centre is an important function of this role. This entails aligning assessment methods, grading criteria, and decision-making processes to maintain fairness and equity.

Internal Verifiers will actively engage in the sampling and monitoring of assessments to ensure the consistency and accuracy of assessment decisions. This process helps identify trends, areas for improvement, and ensures the robustness of the overall assessment system.

For further information on internal verification practice, please see the 'OCN NI Centre Handbook'. Internal Verification Training is also available and can be booked through the OCN NI Website.

11.3 Documentation

For internal quality assurance processes to be effective, the internal assessment and internal verification team needs to keep effective records.

- The programme must have an assessment and internal verification plan. When producing a plan, they should consider:
    - the time required for training and standardisation activities
    - the time available to undertake teaching and carry out assessment,
    - consider when learners may complete assessments and when quality assurance will take place
    - the completion dates for different assessment tasks
    - the date by which the assignment needs to be internally verified
    - sampling strategies
    - how to manage the assessment and verification of learners' work so that they can be given formal decisions promptly
    - how resubmission opportunities can be scheduled.

The following documents are available from OCN NI and document templates can be found in the Centre Login section of the OCN NI website www.ocnni.org.uk:

- A1 – Learner Assessment Record per Learner
- A2 – Assessment Decision Form per Learner
- learner authentication declarations
- Records of any reasonable adjustments applied for and the outcome – please see 'OCN NI's Reasonable Adjustments and Special Consideration Policy' for further information
- M1 Internal Verification Sample Record
- M2 Feedback to Assessor
- Records of any complaints or appeals

11.4 External Quality Assurance

All OCN NI recognised centres are subject to External Quality Assurance. External quality assurance activities will be conducted to confirm continued compliance with the CCEA Regulation General Conditions of Recognition, OCN NI terms and conditions and the requirements outlined within this qualification specification.

The External Quality Assurance is assigned by OCN NI. The External Quality Assurer will review the delivery and assessment of this qualification. This will include, but is not limited to, 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 Quality Assurance report and will help OCN NI determine the centre's risk.

The role of the External Quality Assurer serves as an external overseer of assessment quality, working to uphold consistency, compliance, and continuous improvement within the assessment process. Their role is crucial in ensuring that assessments are valid, reliable, fair, and aligned with the required standards and regulations.

For further information on OCN NI Centre Assessments Standards Scrutiny (CASS) Strategy, please see the OCN NI Centre Handbook.

11.5 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 this qualification must carry out internal standardisation activities prior to the claim for certification.

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.

12. Administration

12.1 Registration

A centre must register learners for this qualification within 20 days of commencement of the delivery of the programme.

For further information on learner registration please see the OCN NI Centre Handbook and the QuartzWeb Manual, available through the Centre Login section of the OCN NI website. Administration training is also available and can be booked through www.ocnni.org.uk.

12.2 Certification

Once all internal quality assurance activities have been successfully completed, the centre can claim certification for the learner(s).

Certificates will be issued to centres within 20 working days from completion of a satisfactory external quality assurance activity, if appropriate, alternatively from the submission of an accurate and complete marksheet.

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.

For further information on the uploading of results please see the QuartzWeb Manual for guidance, administration training is also available and can be booked through OCN NI

12.3 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.

12.4 Equality, Fairness and Inclusion

OCN NI's are committed to ensuring all learners have an equal opportunity to access our qualifications and assessment, and that our qualifications are awarded in a way that is fair to every learner.

OCN NI is committed to making sure that:

- learners with a protected characteristic are not, when they are undertaking one of our qualifications, disadvantaged in comparison to learners who do not share that characteristic
- all learners achieve the recognition they deserve for undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers

For information on reasonable adjustments and special considerations please see the OCN NI Centre Handbook and Reasonable Adjustments and Special Considerations Policy held in the back office of the OCN NI website.

12.5 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.

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12.6 Appendix 1 - Definition of OCN NI's Assessment Verbs

The following verbs are working definitions of those used in OCN NI assessments and how they can be applied and used in different but equally valid contexts.

Verb	Definition	Example
Analyse	To examine closely and break into components to enable results to be interpreted and findings presented	The learner will be expected to perform a critical process which will involve closely examining data, breaking it into meaningful components, interpreting the results, and presenting clear findings to inform future decisions and / or draw meaningful conclusions.
Configure	To set up and customise settings to optimise functionality and meet specific requirements.	The learner will be expected to adjust settings to allow the application to optimise performance and tailor functionality to specific user needs and system environments
Demonstrate	To undertake an activity on a system or process showing complex skills and knowledge in more than one familiar and unfamiliar area and/or contexts.	The learner will be expected to demonstrate how to use the features of a cloud-based system process and/or tool to train and validate a machine learning model, requiring them to apply theoretical knowledge or skills in real-world scenarios to demonstrate competency and understanding.

Determine	To ascertain or establish something precisely through examination, investigation, and/or calculation, often leading to a decision, conclusion, or resolution.	The learner will be expected to identify or decide upon specific information, outcomes, or solutions based on analysis, evidence, calculation and/or reasoning within a given context.
Explain	Make clear a given subject matter and / or give reasons for and/or the procedure in a given situation or regarding a given subject matter / Setting out purposes or reasons.	The learner will be expected to provide clarity on the subject, outlining the procedure or procedures associated with it, and set out reasons for its importance and / or significance. The learner will be expected to demonstrate a detailed comprehension of the subject matter.
Evaluate	An evaluation is normally detailed and provides a solution or conclusion and/or recommendation (perhaps for further exploration). An evaluation could include a comparative element and will ascertain the usefulness or contribution of each part to the whole.	The learner will be expected to assess, analyse, and form judgments about a subject, considering its merits, shortcomings, and potential improvements based on evidence and reasoning.
Research	To systematically investigate and study materials and sources in order to establish facts and reach new conclusions.	The learner will be expected to conduct a structured and methodical approach to defining objectives, gathering data from various sources, systematically investigating and analysing that data, establishing facts, and reaching new conclusions that can inform decision-making and program development
Test	Undertake a process of evaluating and verifying that a system or application performs as required, showing complex skills and knowledge in more than one familiar and unfamiliar area and/or context.	The learner will be expected to conduct a thorough evaluation process requiring a deep understanding of both the system or application itself and its intended purpose. Testing is intended to provide findings to verify the system or application performs as intended and / or identify areas for improvement. This may involve an iterative process of making adjustments in light of test findings and subsequent testing.
Use	Operate a system or process showing skills and knowledge in more than one area and/or contexts and generally carried out on at least three occasions.	The learner will be expected to use a system, process or tool in a practical assessment activity requiring them to apply theoretical knowledge or skills in real-world scenarios to demonstrate competency and understanding.