

QUALIFICATION SPECIFICATION

 gateway
qualifications



Level 4 Diploma in Data Analytics with Artificial Intelligence

Access to HE

Apprenticeships

Digital

Employability &
Enterprise

English & Maths

ESOL

Personal & Social
Development

Professional
Development

Vocational

Qualification Specification:
Gateway Qualifications Level 4 Diploma in Data Analytics with Artificial
Intelligence

This qualification specification covers the following qualification:

Qualification Number	Qualification Title
610/6308/3	Gateway Qualifications Level 4 Diploma in Data Analytics with Artificial Intelligence

Version and date	Change detail	Section/Page Reference
1.0 July 2025	Version 1.0	Throughout

About this qualification specification

Gateway Qualifications is a nationally regulated Awarding Organisation that supports education and training providers through its strong relationships, adaptability and expert team.

This qualification specification contains everything you need to know about this qualification and should be used by everyone involved in the planning, delivery and assessment of the Level 4 Diploma in Data Analytics with Artificial Intelligence.

This document should be read in conjunction with the Gateway Qualifications' Centre Handbook and other publications available on the website, which contain more detailed guidance on assessment and quality assurance practice.

In order to offer this qualification, you must be a Gateway Qualifications recognised centre and be approved to offer this qualification.

If your centre is not yet recognised, please contact our Business Development team to discuss becoming a Gateway Qualifications recognised centre:

Telephone: 01206 911211
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Website: [Gateway Qualifications](https://www.gatewayqualifications.org.uk)

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Introduction

In today's data-driven world, the ability to extract insights, make predictions, and communicate findings effectively is more valuable than ever. The Level 4 Diploma in Data Analytics with AI is designed to equip learners with the technical expertise, analytical mindset, and ethical awareness required to thrive in the rapidly evolving fields of data science and artificial intelligence.

This qualification offers a robust foundation in core data analytics principles while integrating cutting-edge AI techniques. Whether you're aiming to launch a career in data, upskill in your current role, or prepare for further study, this diploma provides the tools and confidence to succeed.

The Level 4 Diploma in Data Analytics with Artificial Intelligence content has been developed in partnership with digital industry experts.

Qualification Overview

1.1 Qualification purpose

The Level 4 Diploma in Data Analytics with Artificial Intelligence has been developed for learners who would like to develop a career in data analytics. It assumes no prior knowledge of statistics, analytics, or programming. The diploma provides a comprehensive pathway into the field, preparing learners for full-time roles as data analysts or for progression to higher study.

Learners will work through the full analytics lifecycle, including data collection, cleaning, transformation, analysis, visualisation, and communication of insights. This hands-on qualification will provide learners with experience with industry-standard programming languages and tools such as Python, SQL, Jupyter Notebooks, and business intelligence platforms. The diploma also introduces machine learning techniques, feature engineering, and applied projects that reflect real business challenges.

Learners in employment can apply skills directly to their workplace data challenges, creating measurable business impact through improved efficiency, higher quality reporting, and enhanced decision-making and day-to-day productivity. Unemployed learners, reskilling, or seeking their first role, build portfolios using curated datasets and simulated projects that demonstrate readiness for entry-level data analytics positions across sectors.

Learners are trained to use AI responsibly and evaluate its outputs critically to ensure accuracy and compliance. Generative AI is integrated as an assistive capability, supporting learners with tasks such as coding support, exploratory analysis, documentation, data storytelling, and ethical risk checks.

By successfully achieving this qualification, learners can gain the opportunity to establish themselves as full-time data analysts with strong foundations in programming, analytics, and applied AI.

This qualification will be mapped directly to the knowledge, skills and behaviours (KSBs) of the [Level 4 Data Analyst apprenticeship standard](#) on the IfATE website.

1.2 Aims and objectives

The aims and objectives of the qualification are to:

- Equip learners with a broad foundational knowledge of data analytics, including core statistical principles, data processing techniques, and AI integration.
- Enable learners to develop practical skills in data manipulation, visualisation, and interpretation using industry-standard tools such as Python, Jupyter Notebooks, and Business intelligence tools.
- Foster an understanding of ethical and legal responsibilities in data handling, including data privacy, governance, and bias mitigation.
- Prepare learners for real-world challenges through a project-based learning approach that emphasises structured problem-solving, critical thinking, and effective communication of insights.
- Support learners' career progression into entry-level data roles or further education in data science and AI-related disciplines.

1.3 Key Information

Qualification summary	
Qualification title	Gateway Qualifications Level 4 Diploma in Data Analytics with Artificial Intelligence
Qualification type	VRQ
Qualification number	610/6308/3
Learning aim reference number	61063083
Level	4
Guided learning hours (GLH)	504
Total qualification time (TQT)	560
Credit value	56
Sector subject area	6.1 Digital technology (practitioners)
Age appropriateness	19+
Grading scale	Pass/Fail
Assessment method	Portfolio of Evidence
Regulation information	This qualification is regulated by Ofqual for use in England and Qualifications Wales for use in Wales.

1.4 Entry requirements

There are no mandatory prior qualifications required for this diploma. It is designed to allow learners to progress from little or no prior knowledge of data analytics, statistics, or programming.

Learners studying this qualification should be proficient at least to Level 2 in English and Maths.

It is recommended that learners have a working knowledge of spreadsheets, including tasks such as sorting, use of formulas, creating simple charts, and basic file management.

Learners may be in employment, seeking work, or reskilling for a new role. For those in work, skills can be applied directly to workplace projects and reporting. For those who are unemployed or reskilling, the diploma can be completed using curated datasets and industry scenarios to build a portfolio that supports employability.

This qualification will be assessed in English. All learners' work must be in English. British Sign Language can be used where it is permitted for the purpose of a reasonable adjustment.

Centres must ensure that learners have the correct information and advice when selecting qualifications to ensure that the qualification will meet their needs.

Centres must ensure that this qualification suits the age and abilities of their learners by ensuring that learners can meet the relevant literacy, numeracy, digital, and health and safety requirements of the qualification.

Learners enrolled on this qualification should not undertake another qualification at the same level with a similar title or content, as this could impact funding eligibility due to duplicated learning.

Centres are responsible for registering learners via the Gateway Qualifications' online registration portal Quartz. Learner registration guidance is available on our website, [Registering learners](#).

1.5 Progression opportunities

On completion of this qualification learners will be equipped with the knowledge, skills and understanding related to Data Analytics with Artificial Intelligence.

Successful completion of the Level 4 Diploma in Data Analytics with Artificial Intelligence will allow learners to progress onto:

- Entry-level employment in data analytics and AI roles
- Other Level 4 and 5 qualifications in Data Analysis/Analyst
- Level 4 Data Analyst apprenticeship
- Level 4 Business Analysis apprenticeship
- Further education in data science, machine learning, or business intelligence

A full in-depth careers information, advice and guidance session should be completed for learners before, during and after completion of learning, finding them the most appropriate progression pathways unique to them and based on their ability and aspirations.

1.6 Equity, diversity and inclusion

At Gateway Qualifications we aim to create an environment which celebrates differences and strives for equitable opportunities and outcomes for all. More than a mere commitment, this Equity, Diversity, and Inclusion Policy stands as a framework, informing every aspect of the work we do. It is our aim to support our staff and learners of all abilities, ensuring the development, delivery, and awarding of qualifications in a fair and inclusive manner.

Whilst developing our qualifications, we have given due consideration to eliminating discrimination, harassment and victimisation, advancing equality of opportunity, and fostering good relations between people who share a relevant protected characteristic (as defined in the Equality Act 2010) and those who do not.

For full details please see the [Equity, Diversity and Inclusion Policy](#).

1.7 Support materials and resources

In addition to this qualification specification, the following resources are available for centres approved to offer the qualification:

- Sample assignment briefs for each unit
- Sample assignment checklists for each unit
- Sample resource guides for each unit
- Sample data (where required)

1.8 Achieving this qualification

The qualification will be awarded to learners who successfully demonstrate their achievement of all learning outcomes of the units of the qualification and satisfy the rules of combination.

The knowledge, skills and understanding that will be assessed as part of the qualification are set out within the unit details.

To be awarded this qualification learners must successfully achieve all three mandatory units.

Mandatory units

Unit	Unit title	Unit reference	Credit value	GLH
Unit 01	Data analytics and Python for data preparation	F/651/7442	26	236
Unit 02	Advanced data analytics, visualisation and machine learning	H/651/7443	25	226
Unit 03	Ethical practice and communication in data	J/651/7444	5	42

2. Assessment

2.1 Assessment overview

Portfolio of evidence only

The qualification is assessed through a portfolio of evidence which is internally assessed by centre staff and externally quality assured by Gateway Qualifications. For more information, please see the [Centre Guide to Best Practice in Internal Assessment](#).

Each learner must build a portfolio of evidence generated from appropriate assessment tasks which demonstrates achievement of all the learning outcomes associated with each unit through practical, work related tasks.

Assessment guidance is provided for each unit. Assessors may use alternative assessment methods as long as they are fit for purpose, meet the requirements of the qualification and ensure the integrity of the assessment process.

On completion of each unit learners must declare that the work produced is their own and the Assessor must counter sign this.

Should a learner not achieve the required standard to pass an assessment, further teaching and learning should take place before attempting the assessment again.

The qualification will be awarded to learners who successfully demonstrate their achievement of all learning outcomes of the units of the qualification.

For learners who are not successful in achieving the whole qualification but still achieve any full unit, a unit certificate of achievement may be awarded.

The knowledge, skills and understanding that will be assessed as part of the qualification are set out within the unit details.

2.2 Assessment language

This qualification will be assessed in English. All learners work must be in English. British Sign Language can be used where it is permitted for the purpose of a reasonable adjustment.

3. Unit Details

3.1 Mandatory units

Unit 01 – Data analytics and Python for data preparation

Unit Reference:	F/651/7442
Unit Summary:	This unit introduces learners to the essential principles of data analytics and the practical use of Python for preparing data for analysis and visualisation. Learners will explore how data is collected, structured, and understood through key analytical concepts, and will develop hands-on skills using Python to clean, transform and prepare data sets for further insight. By the end of the unit, learners will be able to apply Python tools to carry out basic data preparation tasks and demonstrate a foundational understanding of how analytics supports evidence-based decision-making in real-world contexts.
GLH:	236
Credit Value:	26
Grading Method:	Pass/Fail

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	The learner can:
1. Be able to analyse data analytics applications.	1.1. Analyse relevant applications of data analytics in the chosen data domain, demonstrating a breadth of understanding. 1.2. Explain how data analytics and AI can address specific challenges or opportunities .
2. Be able to use Python and data science tools.	2.1. Use Python and data science tools to manipulate and analyse data. 2.2. Review and evaluate Python code and queries. 2.3. Apply coding techniques and tools for effective data analysis.
3. Be able to use integrated development environments (IDE).	3.1. Integrate AI tools into data analysis workflows 3.2. Apply generative AI for storytelling with data 3.3. Evaluate analysis outcomes, identify limitations, and consider alternatives

4. Be able to demonstrate effective data management practices.	4.1 Apply and assess effective techniques for collecting, cleaning, storing, and processing data 4.2 Justify best practices for data handling and processing
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Delivery Guidance: Data analytics and Python for data preparation

Learning Outcome 1:

Applications of data analytics in chosen domains (AC 1.1):

- Business domain: customer segmentation, churn prediction, sales forecasting, market basket analysis, A/B testing, pricing optimisation
- Healthcare domain: patient outcome analysis, disease prediction models, treatment effectiveness analysis, resource allocation optimisation
- Financial domain: fraud detection, credit risk assessment, portfolio optimisation, algorithmic trading strategies
- Retail domain: inventory management, demand forecasting, recommendation systems, customer lifetime value analysis
- Manufacturing domain: predictive maintenance, quality control analysis, supply chain optimisation, production efficiency monitoring
- Marketing domain: campaign effectiveness measurement, attribution modelling, customer journey analytics, sentiment analysis

Challenges and opportunities addressed by data analytics and AI (AC 1.2):

- **Challenges addressed:** data quality issues (missing values, outliers, inconsistencies), data silos and integration problems, scalability issues with large datasets, real-time processing requirements, interpretability of complex models, privacy, and security concerns
- **Opportunities enabled:** automated decision-making, predictive insights for proactive strategies, personalisation at scale, operational efficiency improvements, new revenue streams through data monetisation, competitive advantage through data-driven innovation, cost reduction through process optimisation

Learning Outcome 2:

Using Python and data science tools to manipulate and analyse data (AC 2.1):

- **Data manipulation with pandas:** DataFrame creation and indexing, merging/joining datasets, groupby operations and aggregations, pivot tables and melt, handling missing data (dropna, fillna), data type conversions and categorical data handling
- **Numerical computing with NumPy:** array operations and built-in methods, statistical functions (mean, median, std), indexing and slicing, numpy image analysis
- **Data analysis workflows with Python DA packages:** feature engineering, data imputation, categorical encoding, discretising, transformations and pipelines
- **Integration with other tools:** reading/writing various file formats (txt, CSV, Excel, JSON, SQL), API data retrieval with requests library, and Kaggle API

Reviewing and evaluating Python code and queries (AC 2.2):

- **Code quality assessment:** Linter compliance checking, code readability and documentation standards, variable naming conventions, function design and modularity, DRY (Don't Repeat Yourself) principles

- **Testing and validation:** PEP8, clean code, try-except, pdb, debuggers, AI pair programming
- **Version control review:** Git, GitHub and code reviews, pull request best practices, commit message standards, and branching strategies evaluation

Applying coding techniques and tools for effective data analysis (AC 2.3):

- **Advanced pandas techniques:** method chaining for readable pipelines, lambda functions, custom functions with apply, query and visualisation
- **Visualisation techniques:** matplotlib for technical plots, seaborn for non-technical visualisations, and plotly for interactive dashboards.
- **Development environment tools:** Jupyter Notebooks, VS Code with Python extensions, virtual environments (venv), package management with pip, reproducible environments with requirements.txt

Learning Outcome 3:

Integrating AI tools into data analysis workflows (AC 3.1):

- **AI-powered code assistance:** GitHub Copilot for code completion and generation, Generative AI for debugging assistance
- **Workflow integration strategies:** prompt engineering for code generation, AI tool selection criteria, validation of AI-generated code, combining AI suggestions with domain expertise, and documentation of AI-assisted development

Applying generative AI for storytelling with data (AC 3.2):

- **Narrative generation:** using gen AI tools to create data story outlines, generating executive summaries from analysis results, creating audience-appropriate explanations, and translating technical findings to business language
- **Visualisation enhancement:** AI-assisted chart selection, automated insight highlighting, generating visualisation descriptions for accessibility, and creating infographic layouts with AI tools
- **Interactive storytelling:** Streamlit apps with AI-powered explanations.
- **Communication strategies:** tailoring complexity to audience expertise, generating multiple narrative versions, creating data-driven presentations, building interactive reports with AI explanations

Evaluating analysis outcomes, identifying limitations, and considering alternatives (AC 3.3):

- **Outcome evaluation:** comparing results against business objectives, validating findings with domain experts, assessing practical importance, checking for consistency across different approaches
- **Limitation identification:** data quality limitations and their impact, model assumptions and violations, generalisation boundaries, ethical considerations and biases
- **Alternative approaches:** comparing different analytical methods, exploring various visualisation techniques, assessing trade-offs between complexity and interpretability, considering different tools and technologies, evaluating build vs. buy decisions
- **Critical reflection practices:** documenting decision rationale, maintaining analysis logs, peer review processes, lessons learned documentation, and continuous improvement strategies

Learning Outcome 4:

Applying and assessing effective techniques for collecting, cleaning, storing, and processing data (AC 4.1):

Data collection techniques:

- **Primary data collection:** Primary Methods: Transactional Data Collection, Surveys, Questionnaires, Interviews, Observations, Secondary Sources:
- **Secondary data sources:** Databases, APIs, Public Datasets, Industry Reports, Censuses, Social Media and Online Content

Data cleaning techniques:

- **Quality assessment:** data profiling and quality metrics, missing data pattern analysis (is NAN), outlier detection methods (Winsorizer, ArbitraryOutlierCapper, OutlierTrimmer), duplicate identification and resolution, consistency checking across fields
- **Cleaning operations:** imputation strategies (mean, median, arbitrary, categorical, drop), standardisation and normalisation techniques, one-hot, ordinal and rare label encoding of categorical variables, handling date/time formats, text cleaning and standardisation

Data storage solutions:

- **Database systems:** relational databases (PostgreSQL, MySQL) for structured data, NoSQL databases for unstructured data

Data processing techniques:

- **Batch processing:** ETL pipeline design and implementation

Justifying best practices for data handling and processing (AC 4.2):

Data governance best practices:

- **Documentation standards:** Industrial data standards, data culture, GS1, HL7, HIPAA, ISO20022, EDIFACT, X12, ISO10303 or STEP.
- **Privacy and compliance:** GDPR compliance implementation (consent, right to erasure, data minimisation), Privacy by Design principles, data anonymisation and pseudonymisation techniques, audit trail maintenance, data retention policies
- **Security practices:** encryption at rest and in transit, access control and authentication, data masking for sensitive information, secure data sharing protocols, and incident response procedures

Quality assurance frameworks:

- **Data quality dimensions:** completeness (missing value thresholds), consistency (cross-field validation rules), accuracy (source verification methods), timeliness (freshness requirements), uniqueness (deduplication strategies), validity (format and range checks)
- **Monitoring and alerting:** automated quality checks in pipelines, SLA definition and tracking, anomaly detection in data flows, dashboard creation for quality metrics, escalation procedures for quality issues

Assessment guidance:

LO1:

Type of evidence: A project combining Python packages for Data Analysis and Data Visualisations for fast Data Analytics prototyping. Alternatively, a Business analytics portfolio, analytical reports, data dashboards, or presentations

Assessment criteria: 1.1, 1.2

Additional information: For the chosen data domain, the learner could explore various applications of data analytics, such as predictive analytics, customer segmentation, and sales forecasting. The Jupyter Notebook could include examples of these applications

Assessment guidance:

using relevant datasets to demonstrate the value they deliver and the methods used. For the chosen data domain, identify a challenge that could be addressed through data analytics. Suggest an opportunity that could be realised through the application of an AI solution. Alternatively, learners could develop a portfolio containing three domain-specific analytics projects demonstrating different industry applications. They could produce exploratory data analysis notebooks showing business context, stakeholder requirements, and data quality assessments. Learners should create business intelligence dashboards that display relevant KPIs and present their findings in a 15-minute presentation that explains how analytics addresses specific challenges.

L02:

Type of evidence: A project combining Python packages for Data Analysis and Data Visualisations for fast Data Analytics prototyping. Alternatively, a GitHub repository, Jupyter notebooks, code reviews, and performance reports

Assessment criteria: 2.1, 2.2, 2.3

Additional information: In the Jupyter Notebook, use Pandas to clean and manipulate datasets, and libraries like Matplotlib or Seaborn for visualisation. The dashboard could include interactive visualisations built using Plotly. Demonstrate how you improved performance, corrected errors, and optimised the code. This demonstration could include comments, docstrings, or Markdown cells in the notebook that explain the rationale behind the code.

In the Jupyter Notebook, learners could analyse a public dataset (e.g., sales data, environmental data) using methodologies such as data cleaning, exploratory data analysis (EDA), and hypothesis testing. Alternatively, learners could create a version-controlled repository containing at least 5 Python data manipulation projects that demonstrate proficiency in pandas, NumPy, and data cleaning techniques. They should produce annotated Jupyter notebooks that document EDA processes, statistical summaries, and data transformations, with clear explanations. Learners could document code reviews they have conducted and received, showing the ability to evaluate and improve code quality.

L03:

Type of evidence: A project combining Python packages for Data Analysis and Data Visualisations for fast Data Analytics prototyping. Alternatively, Screen recordings, AI-assisted projects, interactive data stories, and reflection reports

Assessment criteria: 3.1, 3.2, 3.3

Additional information: In the Jupyter Notebook, learners could integrate an AI assistant, such as Copilot, to suggest or optimise code snippets. They can document examples of how AI tools helped with tasks such as data cleaning, ideation, or design thinking.

Learners could use AI tools to generate insights from data, such as creating a narrative or summarising key findings. This AI tool usage could be showcased in the notebook through visualisations or text summaries. The project must outline a structured approach in the notebook, explaining steps such as data collection and cleaning, and justifying why certain techniques were applied. Alternatively, learners could provide screen recordings demonstrating effective use of IDEs and AI tools in their development workflow. They should create an AI-assisted project with clear attribution of AI-generated content and documentation of prompts used. Learners could develop an interactive data story in Streamlit that presents complex insights to different audience types, using appropriate visualisations and narratives. A 1,500-word critical reflection report evaluating the effectiveness and limitations of AI tools in data analysis would demonstrate understanding of appropriate tool selection and ethical considerations.

Assessment guidance:

LO4:

Type of evidence: A project combining Python packages for Data Analysis and Data Visualisations for fast Data Analytics prototyping. Alternatively, Data pipeline implementation, governance documentation, compliance checklists, and quality reports

Assessment criteria: 4.1, 4.2

Additional information: In the Notebook, use markdown cells to explain the data collection methods, cleaning techniques, and storage solutions used. This explanation could include code snippets demonstrating data cleaning with Pandas, such as handling missing values, removing duplicates, and transforming data. Explain the rationale behind the chosen data handling and processing techniques. This explanation could be added to the notebook as comments or Markdown cells. Alternatively, learners could implement an end-to-end data pipeline, demonstrating data collection, cleaning, storage, and processing, with appropriate error handling and monitoring. They should create comprehensive data governance documentation, including data dictionaries, lineage tracking, and standard operating procedures. Learners could produce GDPR-compliance checklists and privacy impact assessments tailored to their data-handling practices. A data quality assessment report with defined thresholds, validation rules, and incident response procedures would evidence understanding of best practices in data management.

Unit 02 – Advanced data analytics, visualisation and machine learning

Unit Reference:	H/651/7443
Unit Summary:	This unit builds on core data analysis skills by introducing learners to more advanced analytical techniques, visualisation methods, and the foundations of machine learning. Learners will explore how to analyse complex data sets, create effective dashboards and visual outputs, and apply basic machine learning models to uncover patterns and trends. The unit also reinforces the importance of presenting data clearly to support insight and decision-making. By the end of the unit, learners will be able to apply a range of advanced tools and techniques to analyse, interpret and communicate data in meaningful ways.
GLH:	226
Credit Value:	25
Grading Method:	Pass/Fail

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	The learner can:
1. Be able to apply core statistical and probabilistic principles to analyse datasets.	1.1. Describe the key principles of statistics, probability, and data analysis. 1.2. Demonstrate the application of these core principles using relevant examples to demonstrate practical understanding and application. 1.3. Implement an appropriate supervised or unsupervised machine learning algorithm to address a defined analytical problem.
2. Be able to demonstrate the ability to structure and plan an independent data analytics project.	2.1. Organise their project effectively using best practices in data analytics. 2.2. Justify the selection of research methodologies applicable to the project goals.
3. Be able to analyse real-world problems using data analytics methodologies.	3.1. Apply appropriate analytics methods to investigate a real-world dataset. 3.2. Assess the effectiveness of the chosen approach and solution. 3.3. Present a structured plan detailing analysis and problem-solving techniques used.
4. Be able to adapt to analytics tools and methods.	4.1 Demonstrate the use of data analytics tools, technologies, or methodologies ,

	clarifying how these were integrated into the project. 4.2 Evaluate the learning process and how the project has prepared the learner for adaptation in the field.
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Delivery Guidance: Advanced data analytics, visualisation and machine learning

Learning Outcome 1:

Key principles of statistics, probability, and data analysis (AC 1.1):

- Statistical principles: descriptive statistics (mean, median, mode, variance, standard deviation), measures of spread and central tendency, skewness and kurtosis, percentiles and quartiles, range, correlation coefficients (Pearson, Spearman)
- Probability principles: Quantifying uncertainty. Experiment, events, and outcomes. Sample and event sets.
- Data analysis principles: hypothesis testing framework (null and alternative hypotheses), significance levels and p-values interpretation, Type I and Type II errors, statistical power and effect size, confidence intervals construction and interpretation, Shapiro-Wilk, Chi-Squared, T-test, Paired T-Test, ANOVA, Mann-Whitney, Wilcoxon and Kruskal-Wallis tests.

Demonstrating application of core principles using relevant examples (AC 1.2):

- Statistical applications: A/B testing for website optimisation showing conversion rate improvements, quality control charts in manufacturing processes, customer satisfaction survey analysis using descriptive statistics, sales trend analysis with moving averages and seasonal adjustments
- Probability applications: risk assessment in insurance using actuarial models, financial portfolio analysis, reliability engineering using failure probability distributions, and applications in pricing strategies
- Advanced analysis examples: regression analysis for sales forecasting with R-squared interpretation, time series decomposition for demand planning (trend, seasonal, residual), survival analysis for customer retention studies, multivariate analysis for market segmentation

Supervised and unsupervised machine learning algorithms (AC 1.3):

- **Supervised learning algorithms:** linear regression for continuous predictions and logistic regression for binary classification
- **Unsupervised learning algorithms:** k-means clustering for customer segmentation, PCA for feature variance
- **Implementation requirements:** data preprocessing steps, train-test split methodology, cross-validation techniques, performance metrics selection (accuracy, precision, recall, F1-score, RMSE), hyperparameter tuning approaches, model evaluation and selection criteria

Learning Outcome 2:

Organising projects effectively using best practices in data analytics (AC 2.1):

- Project management frameworks: CRISP-DM phases (Business Understanding, Data Understanding, Data Preparation, Modelling, Evaluation, Deployment), Agile/Scrum for analytics (sprint planning, daily standups, retrospectives), Kanban boards for task visualisation
- Documentation practices: project charters with clear objectives and success criteria, requirements documentation and user stories, technical documentation standards (README files, code comments), version control

Justifying selection of research methodologies applicable to project goals (AC 2.2):

- Methodology selection criteria: alignment with research questions and hypotheses, data availability and quality considerations, time and resource constraints analysis, stakeholder requirements and expectations, and regulatory and ethical considerations
- Research design justification: experimental vs observational study designs, quantitative vs qualitative vs mixed methods approaches, cross-sectional vs longitudinal analysis rationale, sampling strategies (random, stratified, cluster) justification, sample size calculations and power analysis
- Validation approaches: train-test-validation split rationale, cross-validation strategy selection, A/B test design and randomisation methods

Learning Outcome 3:

Applying appropriate analytics methods to investigate real-world datasets (AC 3.1):

- Supervised learning methods: linear regression for continuous outcomes (house prices, sales forecasting) and logistic regression for binary classification (churn, fraud detection).
- Unsupervised learning methods: k-means clustering for customer segmentation, PCA for dimensionality reduction
- Advanced techniques: neural networks for pattern recognition, time series models, natural language processing for text analytics, recommendation systems (collaborative, content-based filtering)

Assessing effectiveness of chosen approaches and solutions (AC 3.2):

- Performance metrics: classification metrics (accuracy, precision, recall, F1-score), regression metrics (RMSE, MAE, R-squared), clustering metrics (silhouette score, elbow), business metrics alignment (revenue impact, cost reduction, efficiency gains)
- Model validation: confusion matrix interpretation and error analysis, learning curves for bias-variance assessment, feature importance, residual analysis and assumption checking, overfitting detection and regularisation impact
- Comparative analysis: baseline model establishment and improvement measurement, algorithm benchmarking with consistent evaluation, computational efficiency (training time, prediction speed), interpretability vs accuracy trade-offs, robustness testing with different data samples

Presenting structured plans detailing analysis and problem-solving techniques (AC 3.3):

- Analysis documentation: exploratory data analysis reports with visualisations, feature engineering documentation and rationale, model selection process and decision criteria, hyperparameter tuning approach and results
- Visualisation techniques: Tableau dashboards for interactive exploration, Power BI reports for business stakeholders, matplotlib/seaborn for statistical graphics, Plotly for interactive web visualisations
- Communication strategies: technical reports for data science teams, business presentations for non-technical audiences, reproducible notebooks with clear narratives, and user guides for dashboard interaction

Learning Outcome 4:

Demonstrating use of data analytics tools, technologies, or methodologies and their integration (AC 4.1):

- Tool implementation: scikit-learn, Tableau/Power BI
- Methodology application: MLOps practices for production deployment, A/B testing frameworks for model comparison, consistent feature engineering, model monitoring and drift detection

Evaluating the learning process and preparation for field adaptation (AC 4.2):

- Learning evaluation: skills gap analysis and improvement areas, portfolio development showcasing project diversity, and community engagement.
- Professional development: emerging technology exploration (quantum computing, edge AI), industry trend analysis and adaptation strategies, networking and conference participation, mentoring and knowledge transfer activities, continuous learning plan creation

Assessment guidance:

LO1:

Type of evidence: A Data App with a User Interface (UI) combining Python packages for Data Analysis, Data Visualisations and a dashboarding tool for fast Data Analytics prototyping. Alternatively, a statistical analysis portfolio, hypothesis testing reports, simulation studies, and presentation

Assessment criteria: 1.1, 1.2, 1.3

Additional information: In the Jupyter Notebook, include a brief section that explains core concepts such as the mean, median, standard deviation, hypothesis testing, and basic probability. Clearly outline how these principles are foundational to data analysis. Showcase this on the dashboard by incorporating statistical measures, such as calculating the mean and variance of a dataset. In the Jupyter Notebook, you could, for example, run tests like a t-test or use probability distributions (e.g., normal distribution) to interpret a dataset. Implement a machine learning algorithm using libraries such as scikit-learn in a Jupyter Notebook. This could involve tasks like linear regression, clustering, or classification. The Notebook could include visualisations such as regression plots or decision trees to showcase the analysis. Alternatively, learners could create a portfolio demonstrating the application of statistical principles across multiple datasets, including probability distribution analysis, hypothesis testing scenarios, and regression modelling. They should produce technical reports explaining their choice of statistical methods, assumptions checked, and interpretation of results, including p-values, confidence intervals, and effect sizes. Learners could conduct A/B tests to demonstrate understanding of statistical concepts and present findings to both technical and non-technical audiences. This shows the ability to translate statistical significance into business relevance.

LO2:

Type of evidence: A Data App with a User Interface (UI) combining Python packages for Data Analysis, Data Visualisations and a dashboarding tool for fast Data Analytics prototyping. Include a project plan documentation, methodology justification report, and project artefacts.

Assessment criteria: 2.1, 2.2

Additional information: The best ways to achieve this would be to create a clear project structure with organised folders for data, scripts, documentation, and outputs. Then follow a systematic ETL (Extract, Transform, Load) pipeline approach. Document data sources, preprocessing steps, and analytical decisions clearly. This could be demonstrated through researching and identifying the possible predictive modelling methodologies, then justifying your choice of decision tree over logistic regression, for example. Learners could develop a comprehensive project plan for an independent analytics project, following either the CRISP-DM or Agile methodologies, including a project charter, work breakdown structure, risk register, and stakeholder communication plan. They should justify their selection of research methodologies with reference to project goals, data characteristics, and resource constraints. Learners could provide evidence of using project management tools like GitHub or Trello, version control with Git, and documentation platforms, demonstrating how they organised sprints, tracked progress, and adapted plans based on findings.

LO3:

Type of evidence: A Data App with a User Interface (UI) combining Python packages for Data Analysis, Data Visualisations and a dashboarding tool for fast Data Analytics prototyping. Alternatively, a machine learning project repository, model comparison report, and deployment documentation

Assessment guidance:

Assessment criteria: 3.1, 3.2, 3.3

Additional information: In both the dashboard and Jupyter Notebook, learners could analyse a public dataset (e.g., sales data, environmental data) using methodologies such as data cleaning, exploratory data analysis (EDA), and hypothesis testing. Learners should provide commentary on why they chose specific methods and explain limitations or alternative approaches. This can be done in a markdown section of the notebook or as a reflective section in the dashboard. The project must outline a structured approach in both the notebook and the dashboard, explaining steps such as data collection and cleaning, and justifying why certain techniques were applied. Alternatively, learners could implement multiple machine learning algorithms on a real-world dataset, demonstrating the complete ML pipeline from data preparation through model deployment. They should produce a comprehensive report comparing at least five different algorithms using appropriate metrics, including confusion matrices, ROC curves, and performance benchmarks. Learners could document their feature engineering process, hyperparameter tuning approach, and cross-validation strategy. The structured plan should detail data exploration and preprocessing steps, the rationale for model selection, and include visualisations created in Tableau or Power BI to communicate findings effectively.

LO4:

Type of evidence: A Data App with a User Interface (UI) combining Python packages for Data Analysis, Data Visualisations and a dashboarding tool for fast Data Analytics prototyping. Alternatively, a learning portfolio, a tool evaluation report, a professional development plan, and a reflection document.

Assessment criteria: 4.1, 4.2

Additional information: Use Power BI Desktop or Tableau Online to connect to a sales dataset and build an interactive dashboard, alongside Python (pandas and matplotlib) for data cleaning and exploratory analysis. Within the README, reflect on the learning journey, discussing challenges faced and how they were overcome. This could include adapting to new tools or methodologies and how these experiences prepare for future work in data analytics. Alternatively, learners could explore and document their experience with at least three emerging analytics tools or methodologies not covered in the core curriculum, such as AutoML platforms, cloud-based ML services, or specialised visualisation libraries. They should create a comparative evaluation of how different tools were integrated into their project workflow, including their benefits, limitations, and use-case recommendations. Learners could produce a reflective analysis of their learning journey, documenting the challenges they have overcome, the skills they have developed, and how the project has prepared them for industry adaptation. Evidence could include creating tutorials or completing relevant certifications.

Unit 03 – Ethical practice and communication in data

Unit Reference:	J/651/7444
Unit Summary:	This unit introduces learners to the ethical responsibilities involved in working with data, alongside the importance of clear and effective communication. Learners will explore key principles such as privacy, consent, transparency, and fairness, and how these apply to real-world data practices. The unit also develops learners' ability to communicate data insights accurately and responsibly, considering the needs of different audiences. By the end of the unit, learners will be able to demonstrate ethical awareness in their approach to data and communicate findings in a clear, honest, and professional manner.
GLH:	42
Credit Value:	5
Grading Method:	Pass/Fail

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	The learner can:
1. Understand ethical considerations, data privacy, and governance in data analytics practices.	1.1 Examine ethical issues, data privacy, and governance in the project's methodology. 1.2 Evaluate the legal and social implications of data handling and justify approaches that promote responsible and compliant practice .
2. Be able to clarify and present complex data insights to audiences.	2.1 Clarify complex data insights and present them in a way that is accessible to both technical and non-technical audiences . 2.2 Demonstrate the use of appropriate visualisations and narratives to enhance user understanding. 2.3 Collate and organise project documentation using a structured approach to ensure clarity and accessibility
3. Be able to review and revise data analytics project plans.	3.1. Collate and present a complete project plan, including implementation, maintenance, updates, and evaluation phases. 3.2. Reflect on the practical challenges and considerations in executing the project.

Delivery Guidance: Ethical practice and communication in data

Learning Outcome 1:

Examining ethical issues, data privacy, and governance in project methodology (AC 1.1):

- Ethical issues in data projects: algorithmic bias and discrimination risks, consent and autonomy concerns, transparency vs trade secrets tension, dual-use technology considerations, environmental impact of large-scale computing, digital divide and accessibility issues, surveillance capitalism implications, automated decision-making fairness
- Data privacy considerations: personal data identification and classification, consent mechanisms (explicit, implicit, withdrawal), purpose limitation and data minimisation, retention periods and right to erasure, cross-border data transfers, children's data protection, sensitive data handling (health, biometric, political), breach notification requirements
- Governance frameworks: data governance structures and committees, roles and responsibilities (DPO, data stewards, controllers), policy development and enforcement, audit trails and accountability measures, risk assessment methodologies, compliance monitoring systems, incident response procedures, third-party data processor management
- Industry frameworks referenced: UK Government's AI White Paper, UK government Artificial intelligence: ethics, governance and regulation, Information Commissioner's Office: UK GDPR guidance and resources

Evaluating legal and social implications and justifying responsible approaches (AC 1.2):

- Legal implications' assessment: GDPR and UK Data Protection Act 2018 requirements, ICO guidance on AI and data protection, sector-specific regulations (FCA, NHS, education), intellectual property considerations, contractual obligations and SLAs, liability and insurance requirements, cross-jurisdictional compliance, ePrivacy regulations
- Social implications' evaluation: impact on employment and workforce, algorithmic accountability to citizens, trust and social license to operate, cultural sensitivity in global deployments, vulnerable population protections, democratic participation and civic engagement, long-term societal effects, public perception and acceptance
- Justifying responsible practices: Privacy by Design implementation rationale, ethical impact assessment methodologies, fairness metrics selection (demographic parity, equalised odds), human-in-the-loop decision justification, proportionality assessments, legitimate interest balancing tests, public benefit arguments

Learning Outcome 2:

Clarifying complex data insights for technical and non-technical audiences (AC 2.1):

- Technical audience communication: detailed methodology documentation, statistical significance explanations, algorithm architecture descriptions, performance metrics interpretation, code documentation and comments, API specifications and usage guides, peer review presentations, research paper structures
- Non-technical audience translation: executive summary creation techniques, business impact storytelling, analogies, and metaphors for complex concepts, avoiding jargon and technical terms, key takeaway highlighting, action-oriented recommendations, risk communication strategies, benefit realisation explanations
- Audience analysis techniques: stakeholder mapping and personas, communication preference assessment, technical literacy evaluation, decision-making authority

identification, information needs analysis, feedback incorporation methods, engagement level optimisation, cultural communication considerations

Demonstrating appropriate visualisations and narratives to enhance understanding (AC 2.2):

- Visualisation techniques: chart type selection (bar, line, scatter, heat maps), colour schemes for accessibility and meaning, interactive vs static visualisation choices, dashboard layout principles, progressive disclosure techniques, annotation and labelling strategies, responsive design for multiple devices
- Narrative structures: story arc development (setup, conflict, resolution), data journalism techniques, case study presentation formats, before-and-after comparisons, hypothesis-evidence-conclusion flow, emotional engagement techniques, call-to-action integration, multimedia storytelling approaches
- Enhancement strategies: cognitive load management, attention directing techniques, memorable insight creation, complex concept simplification, uncertainty communication methods, confidence interval visualisation, trend highlighting approaches, outlier explanation techniques

Collating and organising project documentation using structured approaches (AC 2.3):

- Documentation structure: standardised templates and formats, information architecture design, version control strategies, naming conventions and file organisation, cross-referencing and linking, table of contents generation, glossary, appendix management
- Documentation types: technical specifications, user guides and manuals, README training materials, standard operating procedures, meeting minutes and action items, risk and issue registers
- Organisation tools and methods: Markdown for technical writing, diagramming tools (draw.io, Lucidchart), knowledge management systems, collaborative editing workflows, review and approval processes, archival and retention policies

Assessment guidance:

LO1:

Type of evidence: A Data App with a User Interface (UI) combining Data Analysis, Data Visualisations and a Dashboard for fast Data Analytics prototyping. Alternatively, an ethical impact assessment, GDPR documentation, bias audit report, and governance policies

Assessment criteria: 1.1, 1.2

Additional information: Discuss ethical considerations in the project, such as data privacy, bias, and fairness. This could be done in the README through a reflective section or in the dashboard through a data ethics section. Explain the legal (e.g. GDPR) and social implications of the data handling and findings. This could be done in the dashboard via a data governance section, or in the README via a reflective section. Alternatively, learners could conduct a comprehensive ethical review of an existing data analytics project, examining privacy risks, potential biases, and governance requirements. They should produce a Data Protection Impact Assessment in line with ICO guidelines, demonstrating an understanding of GDPR principles and their practical application. Learners could evaluate an AI system using frameworks from IBM, Google, or Microsoft, identify ethical concerns, and propose mitigation strategies. Documentation could include a bias audit using tools like Fairlearn, consent management procedures, and justification of approaches that ensure responsible data handling aligned with the UK Government's AI White Paper principles.

Assessment guidance:

LO2:

Type of evidence: A Data App with a User Interface (UI) combining Data Analysis, Data Visualisations and a Dashboard for fast Data Analytics prototyping. Alternatively, a portfolio of visualisations, presentations, written reports, interactive dashboards

Assessment criteria: 2.1, 2.2, 2.3

Additional information: Present complex data insights in a way that is accessible to both technical and non-technical audiences. This could be done through clear visualisations, narratives, and explanations in the dashboard and README. Articulate complex data insights in the dashboard, using visualisations and narratives to enhance user understanding. The README could include a section on how data insights were communicated to technical and non-technical audiences. The dashboard should include visualisations that are easy to understand and provide clear insights into the data. The README should explain how the dashboard was designed to communicate complex data insights to different audiences. The dashboard should include both technical metrics (e.g., statistical outputs, model accuracy) and simplified summaries or visualisations for a general audience. Ensure that the dashboard is user-friendly and intuitive, with clear navigation and interaction patterns. This could involve user testing and feedback sessions to identify areas for improvement. Employ visualisations and narratives in the dashboard to enhance user understanding. Ensure the dashboard includes clear charts and infographics. All code should include documentation, while the dashboard should feature clear labels, tooltips, or explanations for each visualisation or insight. The dashboard should include a clear narrative that guides the audience through the data story, explaining key insights and findings. Alternatively, learners could create a diverse portfolio demonstrating their ability to communicate the same data insights to different audiences—technical teams, executives, and public stakeholders. They should produce at least three distinct visualisations using tools such as Tableau or Power BI, following WCAG 2.1 accessibility guidelines. Learners could develop an interactive data story with appropriate narratives, create an executive dashboard with clear KPIs, and write both technical documentation and plain English summaries. Project documentation should be organised using structured approaches such as documentation templates, version control, and clear information architecture demonstrating professional standards.

LO3:

Type of evidence: A Data App with a User Interface (UI) combining Data Analysis, Data Visualisations and a Dashboard for fast Data Analytics prototyping. Alternatively, complete project lifecycle documentation, maintenance plan, reflection report, and monitoring dashboard

Assessment criteria: 3.1, 3.2

Additional information: Include a comprehensive project plan in the README that covers all phases of the project lifecycle. This could be presented as a Kanban board or a detailed list of tasks and milestones. Reflect on the challenges encountered during the project, including data quality issues, technical difficulties, and time constraints. This could be done in the README through a reflective section or in the dashboard through a project retrospective section. Alternatively, learners could develop comprehensive documentation covering all project phases — from initial planning through deployment and maintenance — along with implementation timelines, update procedures, and evaluation metrics. They should create a maintenance plan with monitoring strategies, incident response procedures, and alerts. Learners could produce a reflective analysis identifying practical challenges encountered, such as model drift, stakeholder resistance, resource constraints, and technical debt, explaining how these were addressed. Evidence should include post-

Assessment guidance:

implementation review findings, lessons learned documentation, and recommendations for future improvements based on real-world considerations.

3.2 Explanation of assessment terms used in this qualification

Term	Definition
Analyse	Break the subject or complex situations into separate parts and examine each part in detail; identify the main issues and show how the main ideas are related to practice and why they are important; reference to current research or theory may support the analysis
Apply	Explain how existing knowledge can be linked to new or different situations or in practice
Assess	Estimate or make a judgment
Clarify	Explain the information in a clear, concise way showing depth and understanding
Collate	Collect and present information arranged in sequence or logical order which is suitable for purpose
Demonstrate	Apply skills in a practical situation and/or show detailed understanding of the topic
Describe	Provide a broad range of detailed information about the topic or item in a logical way
Evaluate	Examine strengths and weaknesses, arguments for and against and / or similarities and differences; judge the evidence from the different perspectives and make a valid conclusion or reasoned judgment; apply current research or theories to support the evaluation when applicable
Examine	Inspect thoroughly in order to determine the nature or condition
Explain	Apply reasoning to account for how something is or to show understanding of underpinning concepts; responses could include examples to support the reasons
Implement	Put into practical effect; Carry out
Integrate	Combine (one thing) with another to form a whole
Justify	Give a detailed explanation of the reasons for actions or decisions
Organise	Arrange systematically. Order
Present	Give a speech or talk in which a new product, idea, or piece of work is shown and explained to an audience
Reflect	Think deeply or carefully about the topic
Review (and revise)	Look back over the topic or activity and make or identify adjustments, changes or additions that would improve the topic or activity based on additional information or experience
Use	Take or apply an item, resource or piece of information as required

4. Quality Assurance

As the portfolio of evidence is assessed by the centre's assessor, the centre must operate an internal quality assurance process. This ensures that qualification standards are being applied consistently within a centre through training, standardisation, sampling of marking and feedback.

4.1 Internal quality assurance

Centres should refer to the online [Centre Handbook](#) for further guidance on staffing requirements.

A centre's internal quality assurance process is led by the Internal Quality Assurer (IQA), who is responsible for identifying and promoting best practices in teaching, learning, and assessment. They are responsible for:

- monitoring assessment practices to ensure they meet our standards.
- sampling assessment decisions and learner work to verify accuracy and consistency.
- observing assessors and tutors, providing feedback and support for improvement.
- facilitating standardisation meetings to align assessment practices across teams.
- supporting assessors with professional development and guidance.
- identifying and promoting best practices in teaching, learning, and assessment.
- handling appeals and complaints related to assessment outcomes.
- maintaining detailed records for audits and external quality assurance visits.

The portfolio of evidence is subject to internal quality assurance whereby a centre regularly samples and evaluates its assessment practices and decisions, and acts on the findings to ensure consistency and fairness.

To ensure the integrity of the internal quality assurance process, Internal Quality Assurers (IQAs) must not quality assure work that they have assessed.

Assessors must ensure fair assessment and equality of opportunity for the learner within the assessment process. In order to ensure that the assessor is making judgements that are consistent with the rest of the assessment team, they must meet regularly with other assessors and internal quality assurers to discuss assessment decisions.

4.2 Sampling

Sampling is a key element of the internal quality assurance process whereby the IQA:

- uses a risk-based approach to determine what to sample and when.
- checks the quality and consistency of each assessor's decisions.
- maintains a common standard of marking within the centre over time.
- applies methods like vertical sampling (same unit across assessors), horizontal sampling (multiple units from one learner), and diagonal sampling (across units and learners).
- ensures sampling covers all units over time, not just at the end of the assessment process.

4.3 Internal standardisation

Internal standardisation is a collaborative process by which tutors and assessors within a centre consider work that they have assessed and, using pre-determined criteria, reach a common agreement on standards as being typical of work at a particular level or grade by comparing samples and providing peer evaluation.

The process of internal quality assurance provides an opportunity for assessors to receive feedback and support, which can help improve their assessment skills. It fosters a culture of continuous improvement and professional development among teaching and assessment staff.

Standardisation will be facilitated by the Centre's IQA and should include all those involved in assessing learner evidence. Centre standardisation events should be held at regular intervals. Centres will be required to keep records of each internal standardisation event, including the date, attendees and notes on any outcomes and actions. Centres will be required to store these records securely for three years, and Gateway Qualifications may ask to see them as part of the centre's quality assurance and monitoring activities.

4.4 External quality assurance

The external quality assurance process for this qualification takes a risk-based approach where external monitoring visits are carried out to review the internal quality systems of centres against key quality standards.

External quality assurance falls into two categories, the first being the quality assurance of the centre's policies and procedures (Centre monitoring) as detailed below, with the second being external sampling of the assessment decisions at qualification level.

4.5 Centre Monitoring

Centre monitoring is undertaken by an External Quality Assurer (EQA) allocated to the centre. The EQA plays a critical role in the Gateway Qualifications approach to centre assessment standards scrutiny as they are responsible for:

- Validating the centre's procedures for delivery of qualifications and assessment.
- Completing reports for each visit with clear action points where needed.
- Carrying out an annual compliance visit.
- Risk rating centres on the above.

The EQA will carry out an initial risk assessment at the centre recognition stage and then annually on an ongoing basis and will give a high/medium/low-risk.

The EQA will arrange the annual quality monitoring visits. These visits:

- Monitor the centre's compliance with the centre recognition terms and conditions by reviewing programme documentation and meeting managers and centre staff.
- Identify any staff development needs.
- Ensure that all procedures are being complied with through an audit trail, and make sure that the award of certificates of achievement to learners is secure.

The EQA will contact the centre in advance of a visit. However, Gateway Qualifications reserves the right to undertake unannounced visits, including during assessment times.

4.6 Quality assuring centre assessment decisions

The external quality assurance process for this qualification involves a risk-based approach where sampling of assessment decisions and internal quality assurance activity to ensure that qualification standards are maintained.

An External Quality Assurer (EQA) will be allocated to the centre to sample the centre's assessment decisions, who will consider whether the sample provides evidence of the following:

- that the standard set out in the units is evidenced and assessment decisions are applied consistently.
- appropriate teaching, stimulus, support, or learning materials and resources.
- an appropriate internal quality assurance strategy and sampling plans.
- appropriate and consistent feedback provided by the assessor to the learner, and by the IQA to the assessor.

A report will be completed by the EQA and made available to the Centres once the sampling activity has been completed.

4.7 Malpractice and Maladministration

Malpractice is any deliberate activity, neglect, default or other practice that compromises the integrity of the assessment process and/or the validity of certificates. It covers any deliberate actions, neglect, default or other practice that compromises or could compromise:

- the assessment process
- the integrity of a regulated qualification
- the validity of a result or certificate
- the reputation and credibility of Gateway Qualifications
- the qualification to the public at large

Centre staff should be familiar with the [Malpractice and Maladministration Policy and Procedure](#).

4.8 Direct claim status

Direct claim status (DCS) is a status given to centres on an individual qualification basis and allows centres to claim certification without waiting for an external quality assurance activity to take place.

DCS is permitted for this qualification. Refer to the [Direct Claims Status page for further details](#).

4.9 Recognition of prior learning

Recognition of Prior Learning enables recognition of achievement from a range of activities through the knowledge, understanding or skills that learners already possess and so do not need to develop these through a course of learning.

The use of RPL is permitted for this qualification.

4.10 Reasonable adjustments and special considerations

Reasonable adjustments are centre permitted, for details on this Centres should refer to the [Reasonable Adjustments and Special Considerations Centre Guidance](#)

For learners who require special consideration at the point of assessment, complete a Special Consideration Request Form.

4.11 Appeals

Learners who wish to appeal about their assessment results or a decision affecting their learning should either be supported by their Centre or should have exhausted their Centre's own appeals process before appealing to Gateway Qualifications. In the latter case, learners must provide Gateway Qualifications with evidence that they have first appealed to their Centre.

Centres and learners should refer to the [Appeals policy](#) for further information.

5. Glossary of terms

This section provides a concise compilation of frequently used terms and acronyms within our organisation and the broader educational context.

Term	Definition
Guided Learning Hours (GLH)	Is the amount of direct contact time a Learner has with immediate guidance or supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training. This cannot be unsupervised study, preparation for study or time used for assessments.
Total Qualification Time (TQT)	Is the number of notional hours which represents an estimate of the total amount of time that could be reasonably expected to be required for a Learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of the qualification. Total Qualification Time is comprised of the following two elements: • the number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and • an estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place by – but, unlike Guided Learning, not under the Immediate Guidance or Supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

