Certificate in Data L3

Contents

What is this Qualification?

NCFE Level 3 Certificate in Data, a regulated qualification designed to prepare learners for entry-level roles such as Data Technician and to support progression into Level 4 study.

Overall aim: equip learners to source, prepare, analyse and present data, store and distribute it securely, and work effectively in multi-functional teams while developing their CPD habits.

Who is this Course for?

Prior Knowledge and Suitability:

- There is **no specific prior knowledge** a learner must have to start this qualification.
- However, learners will need to have **good written and spoken English** to successfully complete the course assessments. Learners may also find it helpful if they have previously achieved a Level 2 Digital Skills or Information Technology qualification.

Why Should Learners Enrol?

- **This course offers:**
  - Build end-to-end capability across the data lifecycle, using scenarios that reflect real work.
  - Awareness of legal and ethical responsibilities around data proctection.
  - Development of professional behaviours and career planning.

- **Skills gained include:**
    - Collection and preparation of data.
    - Applying appropriate statistical methods and simple algorithms to support business outcomes.
    - Visualisation and communication of data.
    - Building a personal development plan for career growth.

Guided Learning Hours & Commitment

- **GLH:** 195 hours (taught sessions)
- **Total Qualification Time (TQT):** 245 hours (includes independent study)
- Learners should expect to commit an additional 50 hours outside of lessons for:
    - Research
    - Assignments
    - Portfolio building

Unit Breakdown

Unit 01: Understand how to source data (20 GLH)
The learner will understand where common sources of data can be found, the purpose and function of data formats and their importance for analysis.

- Where to find data: internal (finance, marketing, HR), external (trusted partners, sharing agreements) and open datasets such as ONS, DEFRA and local government.
- Data formats and why they matter for analysis (numeric, temporal, text, geospatial, media, logical, references) and how consistency, calculation and conversion affect downstream work.
- Data architecture: purpose, principles (access, definition, managed, secured, shared) and functions (storage options on-prem/cloud/third-party/hybrid; permissions, MFA; structured/semi-structured/unstructured). Integration factors (cost, size, third-party apps, efficiency), and access/security requirements (user, systems; confidentiality, integrity, availability).

Unit 02: Collate and format data for processing and analysis (55 GLH)
The learner will be able to collect, format, blend, link and save datasets from multiple sources. They will be able to prepare data for analysis as well as test and assess confidence in the data and its integrity for a specific business requirement.

- Collect, format, save: methods include API, export/import using formats such as CSV/JSON/XML; migrate to the required database; use non-proprietary, unencrypted, uncompressed structures; adopt file-naming conventions.
- Prepare for analysis: choose tools (Excel and/or open-source such as SQL). Cleanse data (remove duplicates/blanks/repetitions; type/sense checks; parse fields like phone numbers).
- Test integrity: explain bias (validity, reliability, repeatability, provenance) and apply validation (length, range, presence, lookup, format, check digits, QA, spell check) and verification (collection method, cross-checking, user-entry accuracy).
- Blend & link datasets: joins (inner/left/right/full/union), consolidation/merging, fuzzy and spatial matching; provide outputs such as a database report or Excel pivot. Distinguish blended (combine into one) vs linked (keep separate, e.g. live + historical).

Unit 03: Analyse data to support business outcomes (30 GLH)
The learner will be able to apply appropriate statistical methods and algorithms, and filter data for analysis to support a specific business requirement.

- Statistical methods: descriptive, inferential, parametric and non-parametric. Techniques include standard deviation, linear regression, clustering, time-series modelling, correlation, chi-square, bootstrapping and cross-validation.
- Algorithms & predictive analytics: summarise trends in numerical/graphical data; choose methods for applications; create forecasts (e.g. Excel function) or simple classification using historical data; discuss assumptions and implications; basic machine-learning awareness for automation.
- Filtering to business criteria: define elements like date, location or centre-specified requirements; apply inclusion/exclusion logically.

Unit 04: Present and communicate data to the appropriate audience (30 GLH)
The learner will be able to apply visualisation techniques and communicate data and results to the appropriate audience for a specific business requirement.

- Communication: methods (written, verbal, non-verbal), formats (presentations, reports, dashboards, infographics, video), techniques (tailoring to technical/non-technical, active listening, open questioning, storyboarding), and audience requirements (role, authority level, timeframes, accessibility, virtual channels).
- Visualisation tools & techniques: choose from PowerPoint, Power BI, Excel, and apply techniques such as charts/graphs, heat maps, flowcharts, tables, images/infographics, XR or 3D. Learners must use at least two tools, including one advanced.

Unit 05: Store, manage and distribute data securely (30 GLH)
The learner will understand the legal and regulatory requirements and apply data handling, storing and distribution securely for a specific business requirement.

- Legal & regulatory: GDPR and DPA 2018 (and key differences), IPR, ICO role, and the data sharing code of practice with example applications (e.g. data-sharing agreements, DPIAs, business continuity).
- Ethics & consent: informed, specific, unambiguous consent; permissions and access; storage/archiving; re-use; bias in automation/ML; privacy; ownership; third-party sharing; whether analysis is ethically appropriate.
- Controls & procedures: anonymisation/pseudonymisation, encryption, segregation, access control, change monitoring; common threat impacts (financial, legal, reputational, operational). Compliant handling, storage and distribution in line with the code and scenario needs.

Unit 06: Collaborate with others and practise continuous professional developmentrs (30 GLH)
This unit covers the essential professional readiness required for a career in the industry.

- The role of data in customer issues, brand, accessibility, internal/external communications and decision-making; understanding team roles, using collaboration tools; producing technical documentation; organisation and prioritisation; researching tech developments; building and maintaining a PDP/CPD.

Assessment Method

- Learners will be assessed through a **portfolio of evidence** (6 workbooks, one for each unit), which includes:
  - Written reports
  - Presentations
  - Discussions
  - Assignments
  - Case studies
- All assessments are:
  - Internally assessed by tutors.
  - Externally quality assured by NCFE.

Career Pathways

After completing the course, learners can progress to:

- Level 4 qualifications in Data Science.
- Entry-level roles such as:
    - Junior Data Analyst
    - Data Administrator
    - Junior Business Analyst
    - Data Technician