

# Qualification mapping

NCFE Level 3 Certificate in Data QN: 603/7882/7

### **Mapping document**

The aim of this document is to show centres how the NCFE Level 3 Certificate in Data (603/7882/7) maps to the knowledge and skills statements within the Level 3 Data Technician Apprenticeship Standard.

The NCFE Level 3 Certificate in Data (603/7882/7) is a standalone qualification that does not form part of the apprenticeship standard or end-point assessment.

This document is for mapping guidance only. All mandatory content from the current specification must be delivered for completion.

### Unit 01 Understand how to source data (L/618/8650)

Learning outcome 1	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Understand where common sources of data can be found	1.1 Explain the role of data in the context of a digital world 1.2 Explain the internal datasets that can be used for analysis 1.3 Explain the external datasets that can be used for analysis 1.4 Describe the open datasets that can be used for analysis	K1: Range of different types of existing data. Common sources of data: internal, external, open datasets, public and private. Data formats and their importance for analysis. Data architecture: the framework against which data is stored and structured, including on premises and cloud.  K15: The role of data in the context of the digital world, including the use of eternal trusted open datasets, and how data underpins every digital interaction and connectedness	N/A
		across the digital landscape, including applications, devises, IoT, customer centricity.	

Learning outcome 2	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Understand data formats and their importance for analysis for a specific business requirement	2.1 Explain the functions and purpose of data formats	K1: Range of different types of existing data. Common sources of data: internal, external, open datasets, public and private. Data formats and their importance for analysis. Data architecture: the framework against which data is stored and structured, including on premises and cloud.  K4: Data formats and their importance for analysis management and presentation tools to visualise and review the characteristics of data. Communication tools and technologies for collaborative working.	N/A
	2.2 Explain the importance of selecting the appropriate data format for data analysis	K2: How to access and extract data from a range of already identified sources.  K4: Data formats and their importance for analysis management and presentation tools to visualise and review the characteristics of data. Communication tools and technologies for collaborative working.	

Learning outcome 3	Assessment criteria	L3 Data Technician Apprenticeship	L3 Data Technician Apprenticeship
		Standard (knowledge)	Standard (skills)
Understand the purpose and function of data architecture for a specific business requirement	3.1 Explain the purpose, principles and functions of data architecture 3.2 Explain the purpose and function of integration	K1: Range of different types of existing data. Common sources of data: internal, external, open datasets, public and private. Data formats and their importance for analysis. Data architecture: the framework against which data	N/A

3.3 Evaluate the factors that	is stored and structured, including on premises	
impact the data architecture	and cloud.	
based on:		
access requirements		
security requirements		

# Unit 02 Collate and format data for processing and analysis (R/618/8651)

Learning outcome 1	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to collect, format and save	1.1 Explain the methods of collecting datasets	K3: How to collate and format data in line with industry standards.	S1: Source and migrate data from already identified different sources.
datasets for a specific business requirement	1.2 Source the appropriate data that contains the required information 1.3 Migrate the appropriate data to the required database 1.4 Apply an appropriate format for the data	N/A	S2: Collect, format and save datasets.
	1.5 Export and save the data		

Learning outcome 2	Assessment criteria	L3 Data Technician Apprenticeship	L3 Data Technician Apprenticeship
_		Standard (knowledge)	Standard (skills)
Be able to prepare	2.2 Apply appropriate data	K10: The range of common data quality issues	S16: Clean data (for example, remove
data for analysis for a specific business	cleansing measures	that can arise (for example, misclassification, duplicate entries, spelling errors, obsolete	duplicates, typos, duplicate entries, out of date data, parse data (format
requirement		data, compliance issues and interpretation/translation of meaning).	telephone numbers according to a national standard) and test and assess confidence in
		interpretation/translation of meaning).	the data and its integrity).

Learning outcome 3	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to test and assess confidence in the data and its integrity	3.2 Apply appropriate validation and verification methods	K11: Different methods of validating data and the importance of taking corrective action.	S8: Apply cross checking techniques for identifying faults and data results for data project requirements.  S16: Clean data (for example, remove duplicates, typos, duplicate entries, out of date data, parse data (format telephone numbers according to a national standard) and test and assess confidence in the data and its integrity).

Learning outcome 4	Assessment criteria	L3 Data Technician Apprenticeship	L3 Data Technician Apprenticeship
_		Standard (knowledge)	Standard (skills)
Be able to blend	4.1 Explain the importance of	K6: The value of data to the business. How to	N/A
datasets from multiple	blending data from multiple	undertake blending of data from multiple	
sources for a specific	sources	sources.	
business requirement	4.2 Apply appropriate	N/A	S4: Blend datasets from multiple sources and
	blended data techniques		present in format appropriate to the task.
	from multiple sources		

4.3 Provide blended data in	S8: Apply cross checking techniques for identifying faults and data results for data project requirements. S9: Audit data results.	
4.3 Provide biended data in	59. Addit data results.	
an appropriate format		

Learning outcome 5	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to manipulate and link external datasets	5.1 Explain the importance of manipulating and linking different datasets 5.2 Apply appropriate manipulation and linking techniques 5.3 Provide linked dataset in an appropriate format	K6: The value of data to the business. How to undertake blending of data from multiple sources.	N/A  S5: Manipulate and link different datasets as required.

# Unit 03 Analyse data to support business outcomes (Y/618/8652)

Learning outcome 1	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to apply statistical methods to identify trends and patterns in data for a specific business requirement	1.1 Explain the importance of using statistical methods 1.2 Explain the common techniques used in statistical methods 1.3 Apply appropriate statistical methods to interpret and identify trends and patterns in data	K9: Basic statistical methods and simple data modelling to extract relevant data and normalise unstructured data.	N/A  S6: Use tools and techniques to identify trends and patterns in data.

1.4 Justify the outcome of	S7: Apply basic statistical methods and
data findings	algorithms to identify trends and patterns in
	data.

Learning outcome 2	Assessment criteria	L3 Data Technician Apprenticeship	L3 Data Technician Apprenticeship
		Standard (knowledge)	Standard (skills)
Be able to apply	2.1 Explain the role of	K7: Algorithms, and how they work using a	N/A
algorithms to identify	algorithms to identify trends	step-by-step solution to a problem, or rules to	
trends and patterns in	and patterns in data	follow to solve the problem and the potential to	
data based on a	2.2 Perform predictive data	use automation.	S7: Apply basic statistical methods and
specific business	analytics based on a dataset		algorithms to identify trends and patterns in
requirement	using algorithms		data.
	2.3 Analyse the outcome of		
	data findings		

Learning outcome 3	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to filter data according to business requirements	3.1 Identify the elements that need filtering 3.2 Carry out filtering techniques	K8: How to filter details, focusing on information relevant to the data project.	N/A

# Unit 04 Present and communicate data to the appropriate audience (H/618/8654)

Learning outcome 1	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Understand the range of methods, formats and techniques used	1.1 Explain the range of methods relevant to communicating data	K5: Communication methods, formats and techniques, including: written, verbal, nonverbal, presentation, email, conversation, audience and active listening.	N/A

to communicate data	1.2 Explain the range of	Range of roles within an organisation,	
to different	formats applied to	including: customer, manager, client, peer,	
roles within an	communications	technical and non-technical.	
organisation	1.3 Explain the range of		
	communication techniques		
	that can be applied		
	1.4 Explain the audience		
	requirements when		
	communicating to a range of		
	roles within an organisation		

Learning outcome 2	Assessment criteria	L3 Data Technician Apprenticeship	L3 Data Technician Apprenticeship
_		Standard (knowledge)	Standard (skills)
Be able to	2.1 Apply the appropriate	N/A	S13: Explain data and results to different
communicate data	communication methods to		audiences in a way that aids understanding.
and results to a	present data and results		
specific audience and	2.2 Summarise gathered	K12: Communicating the results through basic	S3: Summarise and explain gathered data.
business requirement	data using a narrative to	narrative.	
	communicate to a specific		
	audience		

Learning outcome 3	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Understand the range of visualisation tools and techniques used to present data for specific audiences and business requirements	3.1 Explain the range of visualisation tools used to present data for business requirements	K4: Data formats and their importance for analysis management and presentation tools to visualise and review the characteristics of data. Communication tools and technologies for collaborative working.	N/A

Learning outcome 4	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to apply a range of visualisation tools and techniques to present data for specific audiences and business requirements	<ul> <li>4.1 Apply advanced and non-advanced visualisation tools to present data</li> <li>4.2 Apply the appropriate visualisation techniques for specific audiences</li> <li>4.3 Apply the appropriate visualisation techniques for business requirements</li> <li>4.4 Evaluate the decision process of selected visualisation techniques for specific audiences and business requirements</li> </ul>	K4: Data formats and their importance for analysis management and presentation tools to visualise and review the characteristics of data. Communication tools and technologies for collaborative working.	S13: Explain data and results to different audiences in a way that aids understanding.

# Unit 05 Store, manage and distribute data securely (K/618/8655)

Learning outcome 1	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Understand legal and regulatory requirements that apply to data analysis	1.1 Explain the purpose and function of the General Data Protection Regulation (GDPR)  1.2 Explain the purpose of the Data Protection Act (DPA)  1.3 Distinguish the primary differences between the GDPR and the DPA	K13: Legal and regulatory requirements (for example, data protection, data security, Intellectual Property Rights (IPR), data sharing, marketing consent, personal data definition.  The ethical use of data.	N/A

1.4 Explain the functions of	
Intellectual Property Rights	
(IPR)	
1.5 Explain the purpose and	
applications of the data	
sharing code of practice	
1.6 Describe the role of the	
Information Commissioner's	
Office (ICO)	

Learning outcome 2	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Understand the legitimate and ethical use of data	2.1 Explain the ethical considerations when analysing data 2.2 Explain the principles of consent in the use of data 2.3 Explain the ethical considerations related to primary and secondary use of data	K13: Legal and regulatory requirements (for example, data protection, data security, Intellectual Property Rights (IPR), data sharing, marketing consent, personal data definition. The ethical use of data.	N/A

Learning outcome 3	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to securely store, manage and distribute data for a specific business requirement	3.1 Explain the security controls and procedures to ensure data security 3.2 Explain the impacts of common threats to organisations 3.3 Apply data handling	N/A	N/A
	methods to manage data in a compliant manner  3.4 Apply storing and distributing methods to data in a compliant manner  3.5 Summarise the appropriate methods, security controls and procedures to meet the required outcome of data analysis		S12: Store, manage and distribute in compliance with data security standards and legislation.  S3: Summarise and explain gathered data.

### Unit 06 Collaborate with others and practise continuous professional development (M/618/8656)

Learning outcome 1	Assessment criteria	L3 Data Technician Apprenticeship	L3 Data Technician Apprenticeship
		Standard (knowledge)	Standard (skills)
Understand the role of data within a business context	<ul><li>1.1 Explain the importance of data in resolving customer issues</li><li>1.2 Explain the importance of</li></ul>	K14: The significance of customer issues, problems, business value, brand awareness, cultural awareness/diversity, accessibility, internal/external audience, level of technical	N/A
	data to brand awareness  1.3 Explain the importance of data to cultural awareness and diversity	knowledge and profile in a business context.	

1.4 Explain the importance of	
data to accessibility	
1.5 Explain the importance of	
data to an internal and	
external audience	
1.6 Explain the importance of	
data to a business	

Learning outcome 2	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to operate as part of a multi-functional team for a	2.1 Explain the range of roles within an organisation	N/A	S17: Operate as part of a multi-functional team.
specific business requirement	2.2 Identify the communication tools for collaborative working	K4: Data formats and their importance for analysis management and presentation tools to visualise and review the characteristics of data. Communication tools and technologies for collaborative working.	
	2.3 Produce technical documentation of data and results to meet a specific business requirement	N/A	S11: Produce clear and consistent technical documentation using standard organisational templates.
	2.4 Discuss the benefits of organisational and priority skills to a collaborative project  2.5 Apply organisational and priority skills to a collaborative project		S18: Prioritise within the context of a project.

Learning outcome 3	Assessment criteria	L3 Data Technician Apprenticeship Standard (knowledge)	L3 Data Technician Apprenticeship Standard (skills)
Be able to inform own continuous professional	3.1 Evaluate technological developments from a range of possible sources	N/A	S15: Keep up-to-date with developments in technologies, trends and innovation using a range of sources.
development (CPD) through identification of technological developments for a specific business requirement	3.2 Evaluate different learning techniques based on own personal development plan (PDP)	K16: Different learning techniques and the breadth and sources of knowledge.	S14: Review own development needs.