

# **Qualification Specification**

The Advanced Analytics Solutions Level 3 Data Technician Qualification

Qualification number: 610/6091/4

**Qualification Summary** 

Qualification Title	Advanced Analytics Solutions Level 3 Data Technician Qualification	
Ofqual qualification number (QN)	610/6091/4	
Guided Learning Hours (GLH)	200	
Total Qualification Time (TQT)	560	
Minimum Age	18	
Qualification Purpose Summary	This qualification is designed for learners who wish to source, format and present data securely in a relevant way for analysis using basic methods; to communicate outcomes appropriate to the audience; analyse structured and unstructured data to support business outcomes; blend data from multiple sources as directed and apply legal and ethical principles when manipulating data.  The qualification will develop the learner's skills at presenting data for review and analysis by others, using required medium for example tables, charts and graphs. Learners will develop skills in analysing simple and complex structured and unstructured data to support business outcomes using basic statistical methods to analyse the data and will be able to validate the results of analysis using various techniques.  This qualification will help learners communicate results verbally, through reports and technical documentation and tailor the message appropriately for the intended audience.	
Grading	Fail/Pass/Merit/Distinction	
Assessment Methods	Scenario Demonstration with questions, Professional Discussion underpinned by portfolio of evidence.	
Work/Industry placement experience	Learners must produce a portfolio of evidence during the on-programme period of the apprenticeship containing evidence related to the KSBs that will be assessed by the professional discussion.	

# **Change Control**

This section summarises the changes made to this qualification specification.

Version	Publication Date	Summary of Changes
1.0	July 2025	First publication

#### **SECTION ONE - INTRODUCTION**

#### Introduction

If you are using this qualification specification for the purposes of planning training delivery, please ensure that you use the most up to date version.

In the event of a conflict between this document and the assessment plan published by Skills England then the latter takes precedence.

# **Aims and Objectives**

This qualification prepares learners to source, format and present data securely in a relevant way for analysis using basic methods; to communicate outcomes appropriate to the audience; to analyse structured and unstructured data to support business outcomes; blend data from multiple sources as directed and apply legal and ethical principles when manipulating data.

The qualification focusses on the knowledge, skills and behaviours required to successfully carry out analysis of data in a range of workplace settings.

The objectives of this qualification are to develop skills in:

- Sourcing data from a collection of already identified trusted sources in a secure manner
- Collating and formatting data to facilitate processing and presentation for review and further advanced analysis by others
- Presenting data for review and analysis by others, using required medium for example tables, charts and graphs
- Blending data by combining data from various sources and formats to explore its relevance for the business needs
- Analysing simple and complex structured and unstructured data to support business outcomes using basic statistical methods to analyse the data
- Validating the results of analysis using various techniques
- Communicating the results verbally, through reports and technical documentation and tailoring the message for the audience
- Storing, managing and sharing data securely in a compliant manner
- Collaborating with people both internally and externally at all levels with a view to creating value from data
- Practising continuous self-learning to keep up to date with technological developments to enhance relevant skills and take responsibility for own professional development

#### **Support Handbook**

This qualification specification must be used alongside the Guidance Handbook for Employers, Learners, and Training Providers, which is available on request as well as the formal Assessment Plan available from Skills England. The handbook contains additional supporting information to help with planning and delivery and general information on assessment to help learners, employers and training providers plan.

This qualification specification contains all the qualification-specific information you will need that is not contained in the Guidance Handbook.

# **Guidance for entry and registration**

This qualification is designed for learners who wish to analyse data across organisational functions and processes.

Registration is at the discretion of the Training Provider, in accordance with equality legislation, and Individual employers will set their own entry requirements.

There are no specific prior skills or knowledge a learner must have for this qualification; however, learners will find it helpful if they have recent experience of using a range of data management tools such as Excel or similar.

Training Providers are responsible for ensuring that learners are capable of achieving the learning outcomes (LO's) and complying with the relevant literacy, numeracy and health and safety requirements.

Learners registered on this qualification should not undertake another qualification at the same level, or with a similar title, as duplication of learning may affect eligibility for funding.

# Achieving this qualification

To be awarded this qualification, learners are required to successfully achieve a pass or better in both mandatory assessment methods.

Refer to the qualification content for further information.

To achieve this qualification, learners must successfully demonstrate their achievement of all of the knowledge, skills and behaviour criteria as detailed in this qualification specification.

# **Progression**

Learners who achieve this qualification could progress to many further learning opportunities including the following:

- Level 4 Data Analyst
- Level 4 Improvement Practitioner
- Level 5 Improvement Specialist

# **Resource requirements**

There are no mandatory resource requirements for this qualification, but Training Providers must ensure learners have access to suitable resources to enable them to cover all the appropriate learning objectives.

Learners will need to have access to:

- Standard office IT equipment to gather, analyse and present data
- Software such as Excel or similar capable of the analysis required in this qualification
- Advanced tools such as Tableau, Minitab, JMP, SPSS, SigmaXL, or Data Analysis Toolkit are not required however learners will benefit from an appreciation and ability to use one or more of these tools.

### How this qualification is assessed

Assessment is a process of measuring a learner's knowledge and skill against the standards set in a qualification.

This qualification is externally assessed and quality assured.

Advanced Analytics Solutions Level 3 Data Technician Qualification (610/6091/4)

The assessment consists of two components:

- An externally assessed scenario demonstration with questioning
- An externally assessed portfolio of evidence

Learners must achieve at least a pass in both of these assessments to gain this qualification.

All the evidence generated by the leaner will be assessed against the standards expected of a Level 3 Data Technician for each learning objective.

Unless otherwise stated in this specification, all learners taking this qualification must be assessed in English and all evidence presented for external assessment must be in English.

#### SECTION TWO - CONTENT AND ASSESSMENT GUIDANCE

This section provides details of the structure and content of this qualification.

The types of evidence listed are for guidance purposes only. Other types of evidence are acceptable if all learning outcomes are covered, and if the evidence generated can be externally assessed and quality assured.

The explanation of terms shows how the terms used in the qualification content are applied to this qualification, this is contained in Section Three.

#### **Assessment Method 01 Scenario Demonstrations and Questioning**

#### **Assessment Summary**

This mandatory assessment element consists of a 90 minute long scenario demonstration in which apprentices will be observed completing 2 scenario demonstrations, each lasting 45 minutes, in which they will demonstrate the KSBs assigned to this assessment method. This will be supplemented by questioning by the independent assessor to establish the apprentice's understanding of underpinning reasoning.

The demonstrations may not be split, other than to allow comfort breaks as necessary. The independent assessor has the discretion to increase the total time of the scenario demonstrations by up to 10% to allow the apprentice to complete the last task that is part of this element of the EPA. The apprentice will be given one demonstration at a time by the independent assessor and they will complete the first scenario demonstration and questioning before going on to the second demonstration.

Questions must be asked during the observation on a one-to-one basis.

Please refer to the Guidance Handbook for Employers, Learners, and Training Providers for further information regarding the ID verification process and details regarding the set-up of assessments.

While on-programme, the employer/training provider should brief the apprentice on the areas to be assessed by the scenario demonstration. In readiness for the end-point assessment, the apprentice should complete practice scenarios which are provided on request.

To achieve a pass in this assessment all pass criteria must be met, to achieve a distinction all pass and distinction criteria must be met.

KSB Ref. Number	Knowledge, Skill or Behaviour criteria	Learning Objectives In order to achieve a pass grade the learner must demonstrate that they can do or know
K2, K3, K6*, K7, K8, K9  S1, S2, S3, S4, S5, S6, S7, S8, S9, S16, S18	Data Gathering	<ul> <li>Accesses, formats, collates, blends and extracts data from multiple identified sources in line with current industry standards</li> <li>Locates and migrates data from already identified sources</li> <li>Manipulates and links different data sets using tools and techniques to identify trends and patterns</li> <li>Presents data in a format appropriate to the task</li> <li>Summarises and explains the results of the gathered data</li> <li>Identifies trends and patterns in data</li> </ul>
*Note that K6 is split		
		(K2 S1 K3 S2 S3 K6 S4 S5 S6)

between both assessment methods.	Data Analysis and Validation  Approach to Work	<ul> <li>Applies algorithms and basic statistical methods to identify trends in data to audit results</li> <li>Cross checks and filters data to identify faults</li> <li>Cleans, tests and assesses the integrity of the data</li> <li>Identifies opportunities to use automation</li> <li>(K7, K8, K9, S7, S8, S9, S16)</li> <li>Prioritises multiple data sets within the given task using own initiative</li> <li>Works independently, following standard procedures to complete prioritised tasks on time</li> </ul>
		(S18 B2 B3 B4)
ln e	addition to caticfuing all the na	Distinction Criteria ss criteria the following must also be met to achieve a distinction award
K2, K3, K6*,	Data Gathering	Critically analyses the reasons why data is gathered and the
K7, K8, K9	Data Gathering	importance of using multiple sources.
S1, S2, S3, S4,	Data Analysis and	Justifies why we undertake crosschecking of data
S5, S6, S7, S8,	Validation	Evaluates why we need to identify
S9, S16, S18		trends and faults in data
	Approach to Work	Evaluates the prioritisation of tasks within a project
*Note that K6		
is split		
between both		
assessment		
methods.		

# Assessment Method 02 Professional Discussion underpinned by a Portfolio of Evidence

#### **Assessment Summary**

This mandatory assessment element consists of a learner led professional discussion lasting 60 minutes, to include up to 15 open style questions from the assessor to clarify or follow up evidence. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer. Further time may be granted for apprentices with appropriate needs, in-line with the EPAO's Reasonable Adjustments Policy. The professional discussion will be audio-recorded.

The apprentice and the independent assessor will have access to their own copies of the portfolio (either electronic or bring a copy with them) throughout the discussion and both can refer to it as needed. The apprentice can draw on the contents of the portfolio to underpin the discussion, selecting items to inform and enhance their answers.

The independent assessor must ask a minimum of 10 open questions.

Details of other arrangements may be found in the Guidance Handbook.

To pass this assessment element learners must achieve all criteria at pass level. To achieve a pass in this assessment all pass criteria must be met, to achieve a distinction all pass and distinction criteria must be met.

KSB Ref. Number	Knowledge, Skill or Behaviour criteria	Learning Objectives In order to achieve a pass grade the learner must demonstrate that they can do or know
K1, K4, K5,	Data Gathering	Explains the different types of data sets and their formats
K6*, K10, K11, K12, K13, K14,		Describes the value of the data to the organisation and the
K15, K16		importance of analysis management
K15, K10		<ul> <li>Describes the role of data in the digital domain (including the use of external trusted data sets) and how it underpins every</li> </ul>
S10, S11, S12,		digital interaction including applications, devises, IoT and
S13, S14, S15,		customer centricity
S17		Explains the different types of data formats and data
		architectures including premises and cloud
B1, B5, B6		Describes the characteristics of presentation tools to visualise
		and reviews the characteristics of data and communication
*Note that K6		tools and technologies for collaborative working
is split		
between both		(K1, K15, K4, K6)
assessment	Data Analysis and	Describes the methods of validating data how to identify
methods.	Validation	common data quality
		issues and the importance of corrective action
		(K10 K11)

	1	
	Distribution and Dissemination  Approach to Work	<ul> <li>Describes communication methods, formats and techniques commonly used and how these have been applied in a range of roles including customer, manager, client, peer, technical and nontechnical</li> <li>Explains the legal requirements of using data and the importance of using data ethically</li> <li>Describes how they have communicated the results of data analysis to different audiences that assists understanding</li> <li>Explains the significance of customer/end user issues, problems, value to the organisation, brand awareness, cultural awareness/ diversity, accessibility to both an internal and external audience</li> <li>Explains how they have stored, managed and distributed data in line with data security standards and legislation</li> <li>Explains how they have produced clear and consistent technical documentation</li> <li>(K5 K12 K13 K14 S10 S11 S12 S13)</li> <li>Describes how they have reviewed their own development and kept up to date with developments in technologies, trends and innovation</li> <li>Explains how they have integrated into a multi-functional team both internally and externally to their organisation</li> <li>Describes how they have worked in an inclusive manner</li> <li>Works independently to meet required deadlines, managing stakeholder expectations</li> </ul>
		(1445 044 045 047 04 05 05)
		(K16 S14 S15 S17 B1 B5 B6)
In a	addition to satisfying all the pa	Distinction Criteria ss criteria the following must also be met to achieve a distinction award
K1, K4, K5, K6*, K10, K11, K12, K13, K14, K15, K16	Data Gathering	Evaluates and justifies why using different data sets is important to the business and evaluates how incorrect data gathering can affect the output.
S10, S11, S12, S13, S14, S15, S17	Data Analysis and Validation	• N/A
B1, B5, B6  *Note that K6 is split between both	Distribution and Dissemination	<ul> <li>Critically evaluates why we communicate data and why we utilise different communications methods</li> <li>Evaluates why we need to store, manage and distribute data and justifies the importance of maintaining ethical and security standards.</li> </ul>
assessment methods.	Approach to Work	• N/A

# **OVERALL GRADING**

Results from each of the two assessment methods are combined to arrive at the overall grade awarded.

Scenario Demonstrations with Questioning	Professional Discussion underpinned by portfolio	Overall Grade
Fail	Any grade	Fail
Any grade	Fail	Fail
Pass	Pass	Pass
Pass	Distinction	Merit
Distinction	Pass	Merit
Distinction	Distinction	Distinction

# **SECTION THREE – EXPLANATION OF TERMS**

This table explains how the terms used are applied to this qualification (not all verbs are used in this qualification)

Define	Give the meaning of a word or phrase
Demonstrate	Show an understanding of a subject
Describe	Provide details about the subject or item

Explain	Provide details about the subject with reasons showing how or why	
Give examples of	Provide relevant examples to support the subject	
Identify	List or name the main points	
Indicate	Point out or show using words, illustrations or diagrams	
Locate	Find or identify	
List	Make a list of words, sentences or comments	
Outline	Identify or describe the main points	
Plan	Think about, organise and present information in a logical way. This could be presented in writing, as diagrams or an illustration.	
Show	Give information that includes clear knowledge about the subject	
State	Give the main points in brief, clear sentences	
Use	Take an item, recourse or piece of information and link it to the question or task.	

#### **SECTION FOUR - SUPPORT**

#### **Support Materials**

The following support materials are available to assist with the delivery of this qualification and may be available on our website, via ACE360 or on request.

- Guidance Handbook for Employers, Learners, and Training Providers
- Learning resources
- Guidance materials by KSB

We do not explicitly endorse any source of learning materials however there is a wealth of material available on the topic in academic textbooks, media and social domains. Training Providers are cautioned to be circumspect when selecting sources.

#### Reproduction of this document

# Reproduction of this document is permitted by Training Providers under the following conditions:

- You may copy and paste any material from this document however we do not accept any liability for any incomplete or inaccurate copying and subsequent use of this information
- Any photographs, diagrams, logos or illustrations in this publication are either our exclusive intellectual property or are used under license
  - 1. They are protected under copyright law and cannot be reproduced, copied or manipulated without permission of their owners.