



Accelerate People

**Qualification Specification
Accelerate People
Level 3 End-point Assessment
for Data Technician
ST0795/AP01**

Qualification Number 610/2023/0

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Qualification Objective

The level 3 Data Technician apprenticeship is one of a suite of digital apprenticeships that have been designed by industry employers to meet a range of job roles across different industries and sizes of business.

Accelerate People are an end-point assessment organisation (EPAO) for the digital apprenticeship standards that are defined by the Institute for Apprenticeships & Technical Education (IfATE). The [apprenticeship standard](#) and [assessment plan](#) can be found on the [IfATE website](#).

As part of this apprenticeship all apprentices are required to complete an independent end-point assessment (EPA). The purpose of the EPA is to independently assess that any apprentice on this standard is competent in a relevant job role and can evidence meeting all the assessment criteria relating to the knowledge, skills and behaviours (KSB) outcomes.

The Level 3 Data Technician Apprenticeship

Role Profile:

This occupation is found in all sectors where data is generated or processed including but not limited to finance, retail, education, health, media, manufacturing and hospitality. The broad purpose of the occupation is 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. In their daily work, an employee in this occupation interacts with a wide range of stakeholders including colleagues, managers, customers and internal and external suppliers. They would typically work as a member of a team; this may be office based or virtual. An employee in this occupation will be responsible for collecting and processing data under the guidance of a senior colleague or multiple colleagues across the business. This may vary by sector and size of the organisation. An employee would mainly be responsible for their own work but may have the opportunity to mentor others.

Typical job titles:

Data support analyst, data technician, junior data analyst, junior information analyst.

Duties:

This apprenticeship standard includes duties to support alignment between the job role and the apprenticeship standard. Listed below are the duties that all apprentices must demonstrate in their apprenticeship. These duties are not assessed or graded as part of the EPA.

Core Duties:

Duty 1: Source data from a collection of already identified trusted sources in a secure manner.

Duty 2: Collate and format data to facilitate processing and presentation for review and further advanced analysis by others.

Duty 3: Present data for review and analysis by others, using required medium for example tables, charts and graphs.

Duty 4: Blend data by combining data from various sources and formats to explore its relevance for the business needs.

Duty 5: Analyse simple and complex structured and unstructured data to support business

outcomes using basic statistical methods to analyse the data.

Duty 6: Validate results of analysis using various techniques, e.g. cross checking, to identify faults in data results and to ensure data quality.

Duty 7: Communicate results verbally, through reports and technical documentation and tailoring the message for the audience.

Duty 8: Store, manage and share data securely in a compliant manner.

Duty 9: Collaborate with people both internally and externally at all levels with a view to creating value from data.

Duty 10: Practise continuous self-learning to keep up to date with technological developments to enhance relevant skills and take responsibility for own professional development.

Entry Requirements

Qualifications

Apprentices without level 2 English and maths will need to achieve this level prior to taking the EPA. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

Experience

There are no pre-requisite knowledge, skills or understanding requirements defined for entry onto this qualification.

EPA Requirements

To successfully complete the level 3 Data Technician apprenticeship apprentices must achieve at least a pass in both EPA assessment methods. This EPA consists of two discrete assessment methods which have the following grades awarded.

- Assessment Method 1: Scenario Demonstrations with questioning.
 - Pass.
 - Distinction.
 - Fail.
- Assessment Method 2: Professional Discussion underpinned by a portfolio.
 - Pass.
 - Distinction.
 - Fail.

All assessment methods must be taken within a three-month period, otherwise the entire EPA will need to be re-sat/re-taken.

EPA Gateway

For this apprenticeship all apprentices must spend a minimum of 12 months on programme, of which a minimum of 20% must be spent undertaking off-the-job training, before being eligible to undertake the EPA.

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Before starting the EPA, an apprentice must meet the following gateway requirements:

- The employer is satisfied that the apprentice is working at or above the occupational standard.
- Apprentices must have compiled and submitted a portfolio of evidence to underpin the professional discussion.
- For level 3 apprenticeships and above, apprentices without English and mathematics at level 2 must achieve level 2 prior to taking their EPA.

Apprentices may request additional time if they require a reasonable adjustment. Information on how and when to apply is contained within the reasonable adjustments policy.

Once the apprentice is ready to enter gateway the following must be submitted to progress:

- Gateway form:
 - o Demonstrating where evidence has met the outcomes listed on the standard.
 - o Demonstrating where the knowledge has been completed and uploading evidence of any certificates, if applicable.
 - o Confirming any days, the apprentice will be unavailable for EPA.
 - o Advising Accelerate People if the apprentice requires any reasonable adjustments to be made during the EPA.
 - o Confirmation signatures that the apprentice is ready for the EPA.
- Evidence of Maths and English qualifications at Level 2 or above (or acceptable equivalent as specified in the entry requirements section).
- The apprentices completed electronic portfolio (for AM1), see [Portfolio](#)
- for further details.

The gateway form along with all documentation must be uploaded before the EPA can commence. Failure to upload any of the required documentation may delay the EPA start date.

Knowledge, Skills and Behaviours (KSB)

There are no mandatory vendor qualifications or knowledge modules for this apprenticeship. Apprentices are expected to be able to demonstrate competence against the assessment criteria specified within the assessment plan. The assessment criteria are based on the following KSBs, which apprentices are expected to be competent in before entering gateway. K6 is split between both assessment methods, the remaining KSBs only appear in one assessment method.

Knowledge

K1: Range of different types of existing data. Common sources of data - internal, external, open data sets, 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.

K2: How to access and extract data from a range of already identified sources.

K3: How to collate and format data in line with industry standards.

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.

K5: Communication methods, formats and techniques, including written, verbal, non-verbal, presentation, email, conversation, audience and active listening. Range of roles within an organisation, including customer, manager, client, peer, technical and non-technical.

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- K6 (AM1):** How to undertake blending of data from multiple sources.
- K6 (AM2):** The value of data to the organisation.
- K7:** Algorithms, and how they work using a step-by-step solution to a problem, or rules to follow to solve the problem and the potential to use automation.
- K8:** How to filter details, focusing on information relevant to the data project.
- K9:** Basic statistical methods and simple data modelling to extract relevant data and normalise unstructured data.
- K10:** The range of common data quality issues that can arise e.g. misclassification, duplicate entries, spelling errors, obsolete data, compliance issues and interpretation/ translation of meaning.
- K11:** Different methods of validating data and the importance of taking corrective action.
- K12:** Communicating the results through basic narrative.
- K13:** Legal and regulatory requirements e.g. Data Protection, Data Security, Intellectual Property Rights (IPR), Data sharing, marketing consent, personal data definition. The ethical use of data.
- K14:** The significance of end user issues, problems, organisation value, brand awareness, cultural awareness/ diversity, accessibility, internal/ external audience, level of technical knowledge and profile in an business context.
- K15:** The role of data in the context of the digital world including the use of external trusted open data sets, how data underpins every digital interaction and connectedness across the digital landscape including applications, devices, IoT, customer centricity.
- K16:** Different learning techniques and the breadth and sources of knowledge.

Skills

- S1:** Source and migrate data from already identified different sources.
- S2:** Collect, format and save datasets.
- S3:** Summarise and explain gathered data.
- S4:** Blend data sets from multiple sources and present in format appropriate to the task.
- S5:** Manipulate and link different data sets as required.
- S6:** Use tools and techniques to identify trends and patterns in data.
- S7:** Apply basic statistical methods and algorithms to identify trends and patterns in data.
- S8:** Apply cross checking techniques for identifying faults and data results for data project requirements.
- S9:** Audit data results.
- S10:** Demonstrate the different ways of communicating meaning from data in line with audience requirements.
- S11:** Produce clear and consistent technical documentation using standard organisational templates.
- S12:** Store, manage and distribute in compliance with data security standards and legislation.
- S13:** Explain data and results to different audiences in a way that aids understanding.
- S14:** Review own development needs.
- S15:** Keep up to date with developments in technologies, trends and innovation using a range of sources.
- S16:** Clean data i.e. remove duplicates, typos, duplicate entries, out of date data, parse data (e.g. format telephone numbers according to a national standard) and test and assess confidence in the data and its integrity.
- S17:** Operate as part of a multi-functional team.
- S18:** Prioritise within the context of a project.

Behaviours

- B1:** Manage own time to meet deadlines and manage stakeholder expectations.
- B2:** Work independently and take responsibility.
- B3:** Use own initiative.
- B4:** A thorough and organised approach.

B5: Work with a range of internal and external customers.

B6: Value difference and be sensitive to the needs of others.

Assessment

AM1: Scenario Demonstrations with Questioning

The apprentice will be observed by an independent assessor completing two scenario demonstrations in which they will demonstrate the assessment criteria assigned to this assessment method. The scenarios will be supplemented with questioning by the independent assessor. Apprentices will complete the scenario demonstrations once they have passed the gateway.

Preparation:

- Scenario demonstrations will take place online via video conferencing.
- Apprentices will need access to the internet and a working webcam.
- Apprentices will need to have access to software for manipulating data.
- The apprentice must have access to a quiet room and, unless reasonable adjustments have been requested for additional support, be alone in the room.
- Apprentices must have photographic identification (ID) to verify their identity, if they do not produce any ID then the scenario demonstrations will be cancelled.
- One week prior to scenario demonstrations, Accelerate People will provide the apprentice and employer with a guidance document, with information on the format of the test and timescales.

Scenario Demonstrations

The apprentice will be presented with scenarios set by the EPAO; these may use data sets that are in a different business domain to the one in which they normally work. The scenario demonstrations will have a total time of 90 minutes with the independent assessor having the discretion to increase the time of the demonstrations by up to 10% to allow the apprentice to complete their last task.

Apprentices will complete two scenario demonstrations:

- Data gathering.
- Data analysis and validation.

Each scenario demonstration must last 45 mins. They cannot be split, other than to allow for comfort breaks. The apprentice will be given one demonstration at a time by the independent assessor and will complete the first scenario demonstration and questioning before going on to the second demonstration. At the beginning of each scenario, the apprentice will be provided with a scenario description accompanied by annexes containing any relevant documentation.

The following activities must be observed during the scenario demonstrations:

- Access multiple, different data sources.
- Examine data retrieved from sources using appropriate tools.
- Make adjustments to a data set, for example to correct obvious errors or to filter a data set to a required subset of records and/or fields.
- Save a data set to a required location in a specified format.
- Make notes on observations and actions taken.
- Identify and explain key characteristics of a data set, relevant to the stated purpose.

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The independent assessor can ask questions throughout the scenario demonstrations and at the end to allow the apprentice to evidence any gaps in assessment criteria not evidenced by the demonstrations. A minimum of 10 questions will be asked across both scenario demonstrations and will be formed based on the independent assessor's observations. Questions will only be based on the assessment criteria for this assessment method.

AM2: Professional Discussion Underpinned by a Portfolio

Portfolio

Training providers must work with the employer and apprentice to select the best evidence completed during the whole of the apprenticeship. All evidence should be real work tasks, and be clear, well documented and demonstrate competency against the assessment criteria listed in the assessment plan.

Typically, portfolios will contain eight discreet high-quality tasks covering a range of different assessment criteria in each, although it is expected that there will be overlaps of assessment criteria in each task. Evidence sources may include:

- Written accounts of activities that have been completed.
- Photographic evidence and work products (annotated).
- Work instructions.
- Safety documentation.
- Technical reports.
- Drawings.
- Company policies and procedures as appropriate to the activities.
- Progress review documentation.
- Witness testimonies.
- Feedback from colleagues and/or clients.
- Video clips (maximum total duration 5 minutes); the apprentice must be always in view and identifiable.
- This is not a definitive list; other evidence sources are possible.

Where apprentices have worked on confidential or secure tasks, they should write high level statements about these tasks, but not upload any restricted information or data. Apprentices should be prepared to discuss further details during the professional discussion.

Any employer contributions should focus on direct observation of performance (for example witness statements) rather than opinions. The evidence provided must be valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer and apprentice confirming this.

The portfolio should **not** include any methods of self-assessment or standalone knowledge statements. Any demonstration of knowledge must be in context of a specific work-related task.

Portfolios should be in an electronic format which must be submitted to Accelerate People at gateway. Paper-based portfolios will not be accepted. If an apprentice uploads a video clip this must be a file that can be uploaded with their portfolio. A link to a video will not be accepted and will not be used as part of their evidence.

Professional Discussion

The professional discussion will take place at least two weeks after the portfolio has been accepted at gateway.

- The professional discussion will take place online via video conferencing.
- Apprentices will need access to the internet and a working webcam for the entire duration.
- The apprentice must have access to a quiet room and, unless reasonable adjustments have been requested for additional support, be alone in the room.
- Apprentices must have photographic identification (ID) to verify their identity, if they do not produce any ID then the professional discussion will be cancelled.
- The discussion will last for 60 minutes with the independent assessor having the discretion to increase the time of the questioning by up to 10% to allow the apprentice to complete their last answer.
- A minimum of 10 questions will be asked and will be formed based on the evidence and grading requirements in the table below.
- Apprentices are allowed access to their portfolio throughout the discussion.

Assessment Criteria

AM1

KSBs	Pass Criteria	Distinction Criteria
Data Gathering		
K2, K3, K6*. S1, S2, S3, S4, S5, S6. *Note that K6 is split between both assessment methods.	Accesses, formats, collates, blends and extracts data from multiple identified sources in line with current industry standards. Locates and migrates data from already identified sources. Manipulates and links different data sets using tools and techniques to identify trends and patterns. Presents data in a format appropriate to the task. Summarises and explains the results of the gathered data. Identifies trends and patterns in data.	Critically analyses the reasons why data is gathered and the importance of using multiple sources.
Data Analysis and Validation		
K7, K8, K9. S7, S8, S9, S16.	Applies algorithms and basic statistical methods to identify trends in data to audit results. Cross checks and filters data to identify faults.	Justifies why we undertake crosschecking of data. Evaluates why we need to identify trends and faults in data.

KSBs	Pass Criteria	Distinction Criteria
	<p>Cleans, tests and assesses the confidence and integrity of the data.</p> <p>Identifies opportunities to use automation.</p>	
Approach to Work		
S18. B2, B3, B4.	<p>Prioritises multiple data sets within the given task using own initiative.</p> <p>Works independently, following standard procedures to complete prioritised tasks on time.</p>	Evaluates the prioritisation of tasks within a project.

AM2

KSB	Pass Criteria	Distinction Criteria
Data Gathering		
K1, K4, K6*, K15. *Note that K6 is split between both assessment methods.	<p>Explains the different types of data sets and their formats.</p> <p>Describes the value of the data to the organisation and the importance of analysis management.</p> <p>Describes the role of data in the digital domain (including the use of external trusted data sets) and how it underpins every digital interaction including applications, devices, IoT and customer centricity.</p> <p>Explains the different types of data formats and data architectures including premises and cloud.</p> <p>Describes the characteristics of presentation tools to visualise and reviews the characteristics of data and communication tools and technologies for collaborative working.</p>	Evaluates and justifies why using different data sets is important to the business and evaluates how incorrect data gathering can affect the output.
Data Analysis and Validation		
K10, K11.	Describes the methods of validating data how to identify common data quality issues and the importance of corrective action.	None specified.
Distribution and Dissemination		
K5, K12, K13, K14. S10, S11, S12, S13.	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 non-technical.	<p>Critically evaluates why we communicate data and why we utilise different communications methods.</p> <p>Evaluates why we need to store, manage and distribute data and justifies</p>

KSB	Pass Criteria	Distinction Criteria
	<p>Explains the legal requirements of using data and the importance of using data ethically.</p> <p>Describes how they have communicated the results of data analysis to different audiences that assists understanding.</p> <p>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.</p> <p>Explains how they have stored, managed and distributed data in line with data security standards and legislation.</p> <p>Explains how they have produced clear and consistent technical documentation.</p>	<p>the importance of maintaining ethical and security standards.</p>
Approach to Work		
<p>K16. S14, S15, S17.</p> <p>B1, B5, B6.</p>	<p>Describes how they have reviewed their own development and kept up to date with developments in technologies, trends and innovation.</p> <p>Explains how they have integrated into a multi-functional team both internally and externally to their organisation.</p> <p>Describes how they have worked in an inclusive manner.</p> <p>Works independently to meet required deadlines, managing stakeholder expectations.</p>	<p>None specified.</p>

Grading

Each assessment method is graded individually and combined to give an overall grade. Assessment criteria do not appear in more than one assessment method, therefore an assessment criteria failed in one assessment method cannot then be demonstrated in the other assessment method. All EPA methods must be passed for the EPA to be passed overall.

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

Scenario Demonstrations with Questioning	Professional Discussion Underpinned by a Portfolio	Overall Grading
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Fail	Any grade	Fail
Any grade	Fail	Fail
Pass	Pass	Pass
Pass	Distinction	Merit
Distinction	Pass	Merit
Distinction	Distinction	Distinction

Re-sits and Re-takes

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take at the employer's discretion. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

A re-sit does not require further learning, whereas a re-take does. Apprentices should have a supportive action plan to prepare for a re-sit or a re-take.

An apprentice who fails one or more assessment methods, and therefore the EPA in the first instance, will be required to re-sit or re-take the failed assessment method(s) only.

The timescales for a re-sit/re-take is agreed between the employer and EPAO. A re-sit is typically taken within two months of the EPA outcome notification. The timescale for a re-take is dependent on how much re-training is required and is typically taken within four months of the EPA outcome notification.

All assessment methods must be taken within a three-month period, otherwise the entire EPA will need to be re-sat/re-taken.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to a higher grade.

Where any assessment method must be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of distinction, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

Specimen

All specimen materials, such as an example scenario demonstration, can be accessed by registered training providers from the knowledge area on ACE360.

Accelerate People

Accelerate People are an independent EPAO specialising in digital apprenticeship EPAs. If you have any questions or queries relating to this qualification specification or EPA, please contact us using the details below.

Registered training providers with Accelerate People can access further guidance material on the knowledge base on ACE360.

Contact Details:

Email: info@accelerate-people.co.uk.

Visit: www.accelerate-people.co.uk Registered training providers with Accelerate People can access further guidance material on the knowledge base on ACE360.

Registered office: Accelerate People Limited, Scale Space, Imperial College White City Campus, 58 Wood Lane, London, W12 7RZ.

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