



Apprenticeship Programme Guide

DATA ESSENTIALS

LEVEL 3 APPRENTICESHIP WITH
INCLUSIVE MICROSOFT EXCEL
CERTIFICATION



DIGITAL AND DEGREE APPRENTICESHIPS

Building tech careers in the workplace

We offer digital and degree apprenticeships that focus on the most in-demand tech skills including; cyber, IT, software development, data and digital marketing, along with others in project management and artificial intelligence (AI).

With programme pathways from Level 3 – Level 7, we help learners to progress and grow within your company, helping you retain talent and build capabilities.

Our award-winning approach to blended learning enables apprentices to develop further and faster, adding immediate value to their roles, whilst our interactive portal with real-time dashboards and trigger alerts enable managers to effectively and efficiently track progress.



Experience: 30,000 apprenticeships placed



An unrivalled talent pool: 100,000 apply to join our programmes every year



Award-winning: Recipient of the Gold Award at the Learning Tech Awards 2020 for our apprenticeship delivery model

98%

Higher than average provider performance with a pass rate of 98.61%

Based on end point assessments by the BCS 2022

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ROLE PROFILE

DATA ESSENTIALS

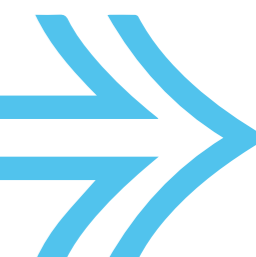
Data-focused roles are found in all sectors where data is generated or processed such as finance, retail, education, health, media, manufacturing and hospitality.

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.

Individuals looking to undertake this programme need:

- Strong interest in data and technology
- A methodological, step-by-step approach to resolving issues
- Business skills like effective communication, teamwork and task/time management
- The adaptability to do a range of work—sometimes complex and non-routine in different environments
- The ability to work under direction, use discretion and determine when to escalate issues



JOB ROLE SUITABILITY

As an employer is it important to assess whether a candidate (a new hire or existing employee) is working in a suitable job role to successfully complete their programme.

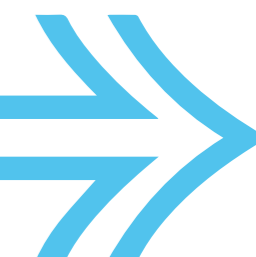
The checklist has been created to help you assess whether your apprentice will be in a position to demonstrate all of the following duties during their programme.

Job roles this programme is a great match for:

- Data Technician
- Data Support Analyst
- Junior Information Analyst
- Junior Data Analyst

Checklist

- | | |
|----|--|
| 1 | Source data from a collection of already identified trusted sources in a secure manner |
| 2 | Collate and format data to facilitate processing and presentation for review and further advanced analysis by others |
| 3 | Present data for review and analysis by others, using required medium for example tables, charts and graphs |
| 4 | Blend data by combining data from various sources and formats to explore its relevance for the business needs |
| 5 | Analyse simple and complex structured and unstructured data to support business outcomes using basic statistical methods to analyse the data. |
| 6 | Validate results of analysis using various techniques, e.g cross checking, to identify faults in data results and to ensure data quality |
| 7 | Communicate results verbally, through reports and technical documentation and tailoring the message for the audience |
| 8 | Store, manage and share data securely in a compliant manner |
| 9 | Collaborate with people both internally and externally at all levels with a view to creating value from data |
| 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

The entry requirements for this programme are as follows:

- 3 GCSEs (or equivalent) at grades 4+ (A-C) in any subject
- GCSE Maths and English (or equivalents) at grades 3+ (D or above)
- Prospective apprentices must not hold an existing qualification at the same or higher level as this apprenticeship in a similar subject

Experience (if the learner can't meet the qualification requirements):

Those working in a role (for at least 6 months) where data is used on a regular basis and can demonstrate working towards Level 2 in Maths and English.

FINDING NEW TALENT

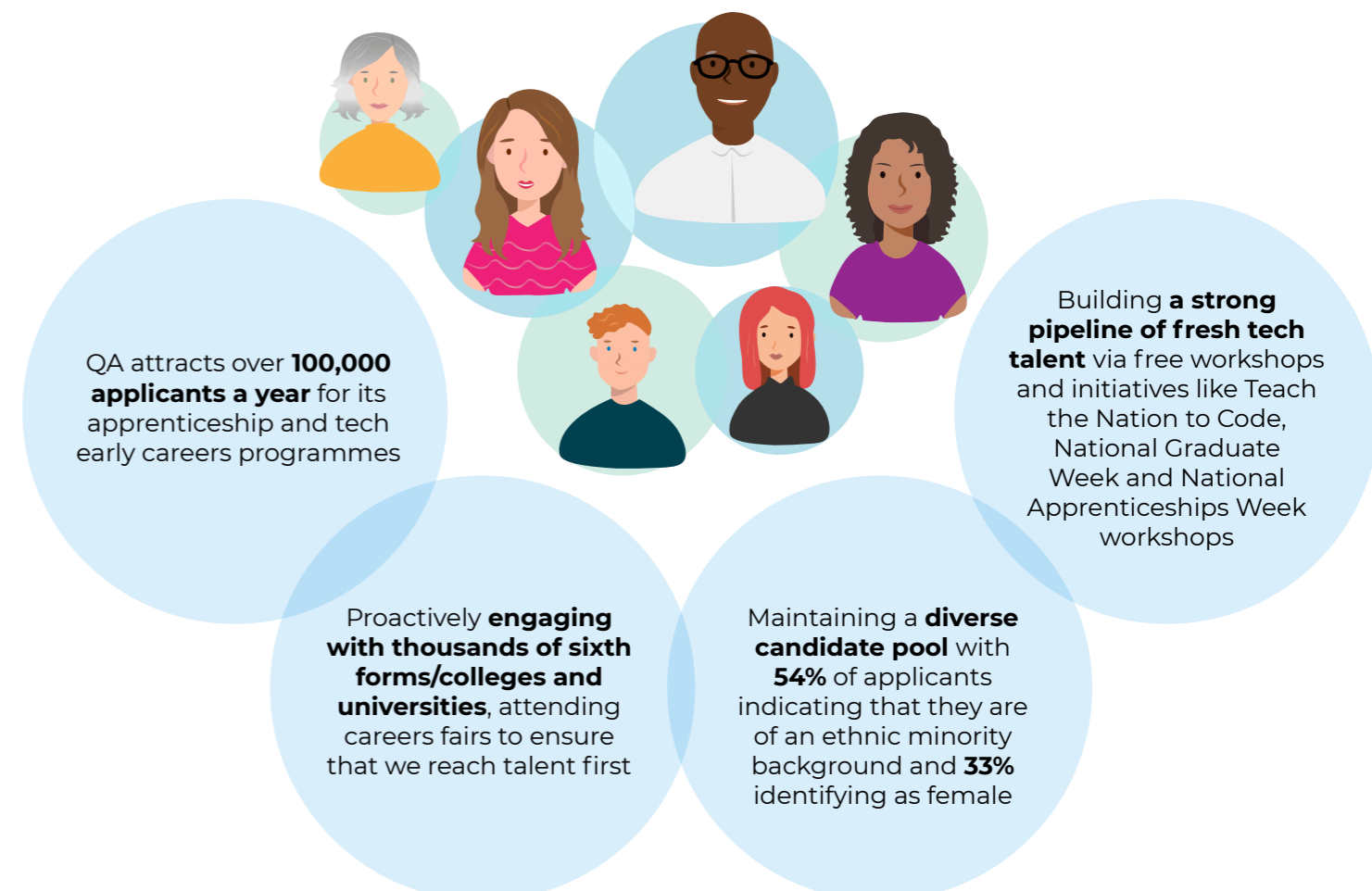
Each year, QA attracts over 100,000 applicants for our early careers opportunities, building a robust pipeline of fresh tech talent.

Our success lies in leveraging a wide array of channels and partnerships that ensure we have a constant flow of applications and access to a diverse range of candidates.

We have strong partnerships in place with educational and career institutions, including local job centres, career networks, youth groups, and universities.

We have a prominent presence on all major job boards in the market, ensuring maximum visibility for our job postings.

Our QA team employs social media campaigns to reach specific profiles in certain regions or demographics.



DIVERSITY AND INCLUSION

We're passionate about diversity in tech

It's our mission to help eradicate the gender gap, and make sure equal opportunities are given to applicants from all backgrounds. We do this through our long-standing partnerships, QA-driven initiatives and use of trending tools and software.

Diversity-first candidate attraction

We've invested in using augmented copy checking tools to ensure language is inclusive, open to all and free from bias.

We use inclusive imagery throughout our campaigns – producing visual content that promotes diversity and inclusion.

Promoting inclusivity

We nurture relationships with influencers, schools, colleges and universities via events and interactive sessions to ensure learners from all backgrounds are given the same opportunities.

Diversity partnerships

We forge partnerships with like-minded organisations who share our vision on STEM gender equality including STEM women, Stemettes, Young Professionals and Coding Black Females.

Initial Assessment

Every candidate goes through an initial assessment where their current knowledge, skills and behaviours are measured and mapped against the apprenticeship standard.

This process is an assessment of the apprentice's eligibility for an apprenticeship programme, and ensures they are placed on the right programme at the right time. This contributes towards successful completion and a good learner experience.

We make tech skills accessible to all

We run free tech workshops including 'Teach the Nation to Code' and 'Teach the Nation to Cloud' so anyone can explore technology career opportunities.

A BLENDED APPROACH TO LEARNING

How we deliver

QA apprenticeships are designed to immerse the apprentice in their job role while providing time for them to complete the required off-the-job training to become occupationally competent and ready to undertake End-Point Assessment to complete their apprenticeship standard.

QA Apprenticeships also provide more flexibility for the employer, allowing apprentices to learn through a combination of project and lab work, live events, self-research, self-paced learning and peer-to-peer learning.

Full-time apprentices (those that work 30 hours per week or more) will be required to spend at least 20% of the apprentice's normal working hours over the planned duration of the apprenticeship practical period on off-the-job training. This means the minimum requirement for apprentices working 30 hours or more per week is an average of 6 hours of off-the-job training per week (i.e. 20% of 30 hours) over the planned duration.

Employer coaching, shadowing and mentoring remain off-the-job training, however, there will be more defined requirements to guarantee this is directly related to the apprenticeship and will be part of the training plan.



LEARNER SUPPORT



Safeguarding at QA

Safeguarding means ensuring the safety and wellbeing of our learners.

At QA, this means ensuring our policies and processes promote and protect learner wellbeing and that while you are on programme, we teach learners about the types of risk facing modern day British citizens.

This includes cyber risks, mental and physical health information, risks of radicalisation or grooming and much more.

Ways to access support if you are worried for yourself or someone else:

- Call us – anytime 07808 050273
- Email: safeguarding@qa.com
- Contact your Digital Learning Consultant (DLC), tutor or account manager
- Speak to any member of QA staff onsite



Prevent at QA

Prevent is part of the Government's counter-terrorism strategy.

At QA, this means we teach our staff and learners about the four British values: democracy, rule of law, individual liberty and respect and tolerance.

We also work with Prevent partners to identify people at risk of being or causing terror related harm.

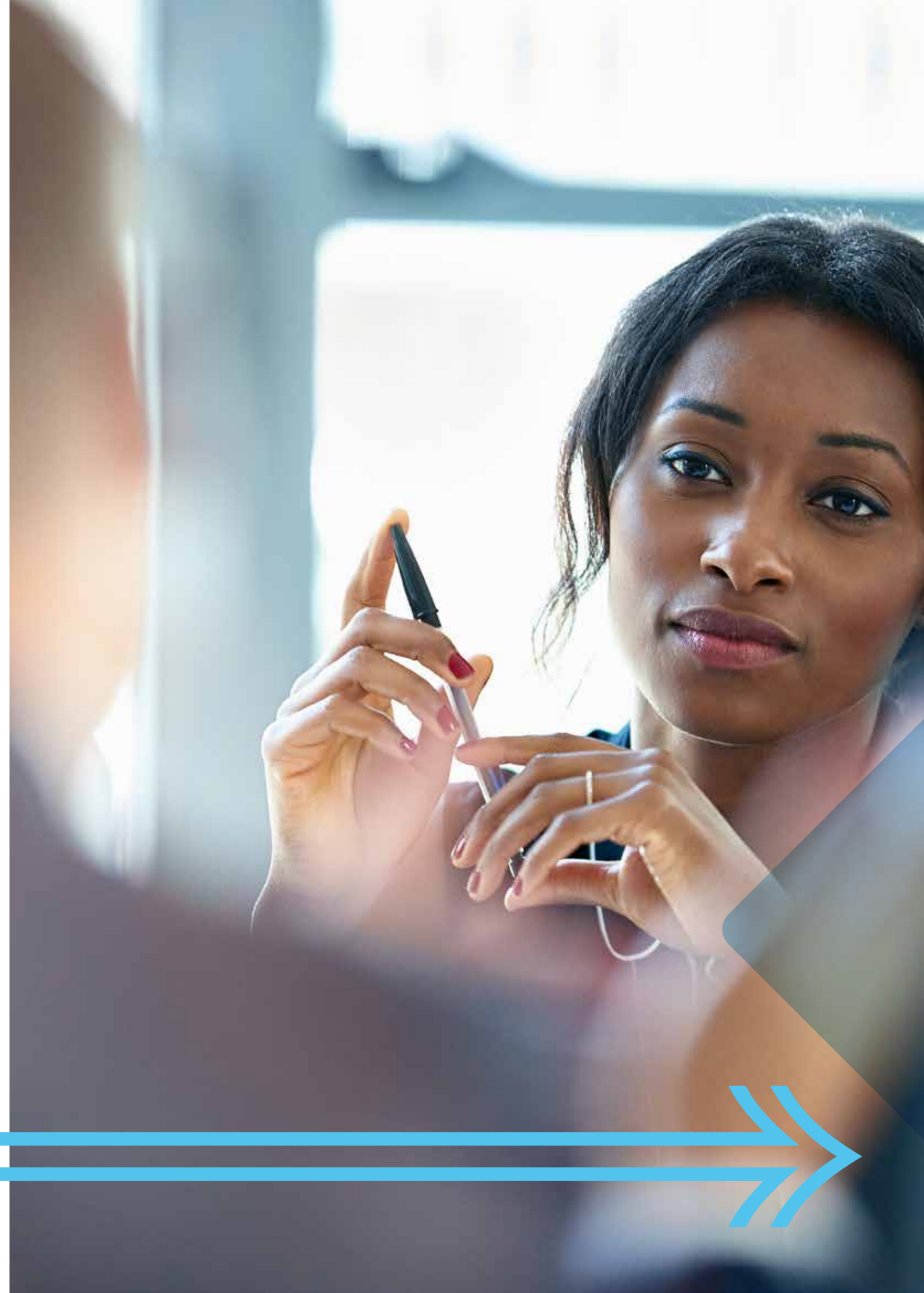


Mental Health at QA

Emotional and mental wellbeing is an important component of successful learning.

Understanding how to protect mental health and promote emotional wellbeing is part of maintaining positive mental welfare.

We will always actively encourage conversations and make sure information is readily available to both learners and staff with regards to mental wellbeing.



DIGITAL BY DESIGN APPRENTICESHIP PROGRAMMES

Digital by Design programmes

QA Digital by Design apprenticeships provide a greater focus on online learning together with using live interaction where it adds the most value for learners.

It means that there is a single learner journey which brings teaching, coaching, learning and assessment into a single, repeatable flow for every module. This ensures that from the beginning of the programme there is a clear focus on successful completion of the end-point assessment (EPA).

In Digital by Design, these three elements will work together:

- The content
- The service and support
- The technology

Discover, practise and apply

All QA apprenticeships use a guided discovery approach to learning, as opposed to traditional methods of delivery such as live events. This shifts the emphasis from content delivery to our learners and their context, resulting in the apprentice feeling empowered to take ownership of their learning experience through the “Discover, Practise, Apply” model.



DISCOVER

Learners will learn the theory, by exploring subjects online and in the live events.



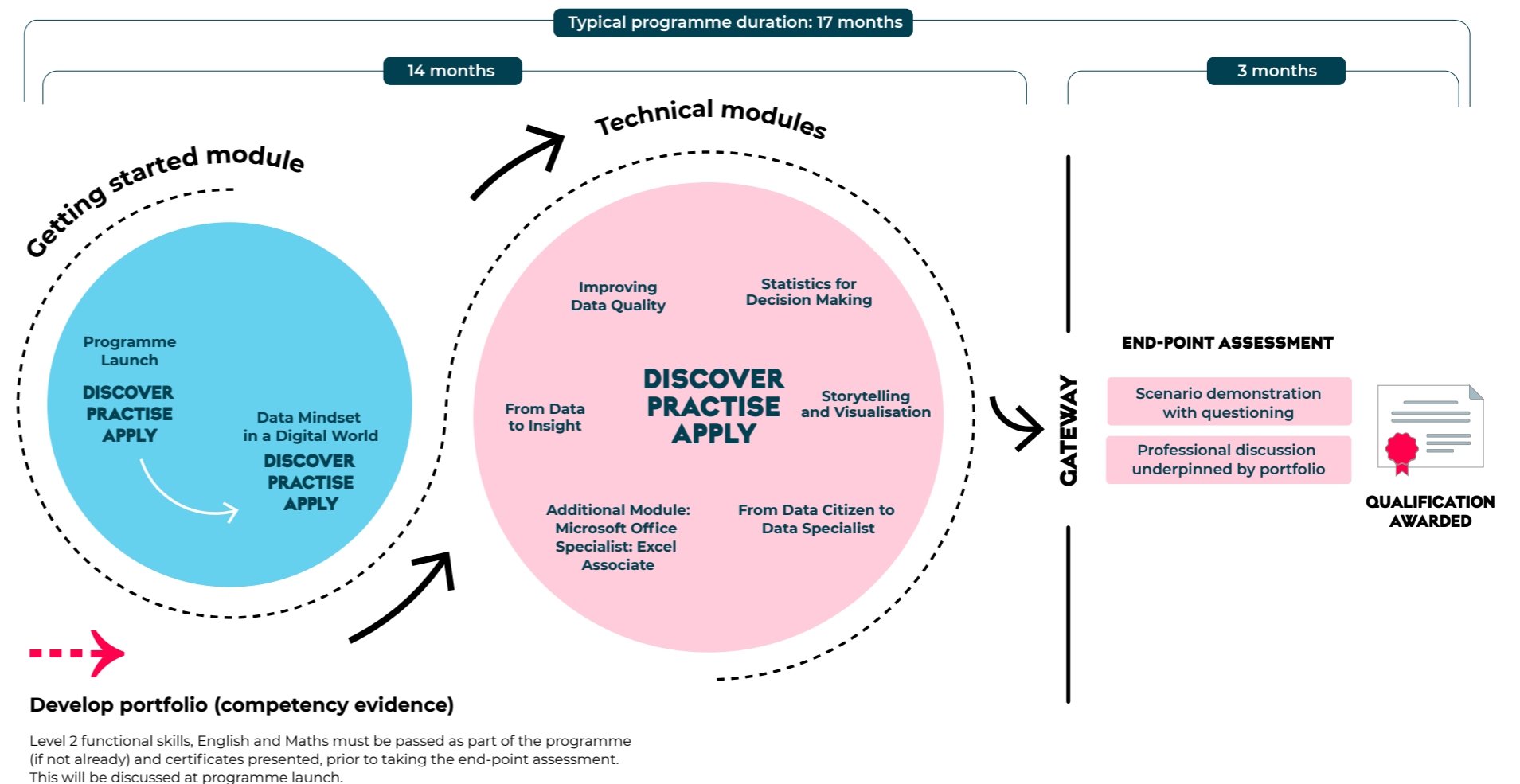
PRACTISE

Learners will practise their new-found knowledge by completing activities - online, in the live events and (most importantly) directly at work in their day-to-day role.



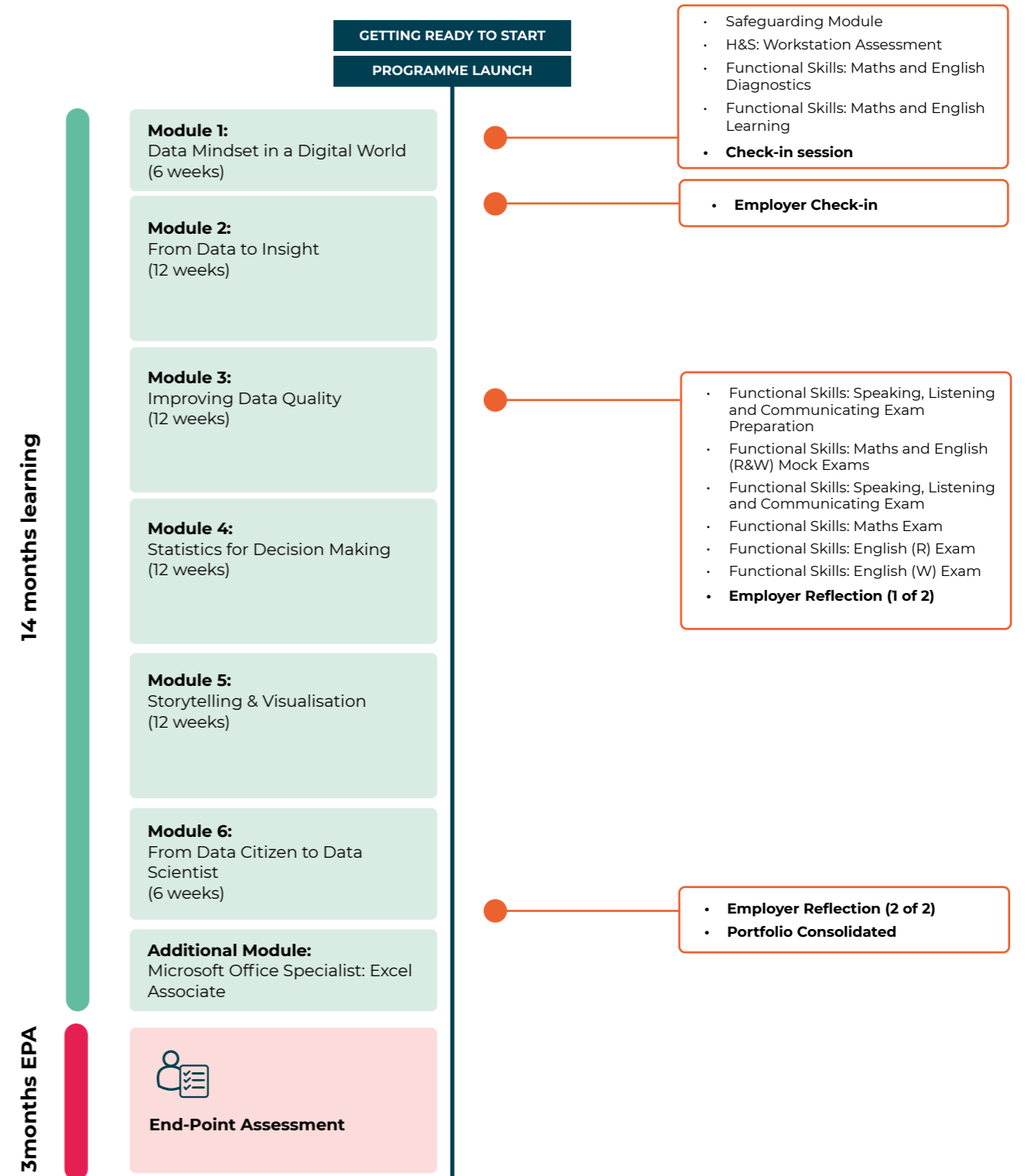
APPLY

Learners will apply what they've discovered and practised at work. They will actively contribute to your organisation whilst building their portfolio of evidence (showing how they've applied their new skills) to gain their qualification.



THE LEARNER'S JOURNEY

Typical Programme Duration: 14 months (+ 3 months for End-Point Assessment)



Qualification
Awarded

GETTING STARTED MODULE

The modules in our Microsoft Data Essentials apprenticeship equip learners with the advanced technical skills they need for their role. Each module develops the core set of skills they must be able to do well to be competent.

In each module, learners will 'discover', 'practice' and 'apply' what they've learned. This helps them put their newly-found knowledge into action back at work.

There are 6 modules to complete with the following learning outcomes.

There is also an additional module which includes all of the theory you need to be able to pass the MO-200 Microsoft Excel Exam.

Programme Launch (Synchronous session online)

- Learn about the programme and structure
- Calendar of apprenticeship events
- Setting expectations
- Complete first data insights activity
- Setting up for success

Module 1: Data Mindset in a Digital World

This module offers an in-depth overview of data fundamentals, covering legal and ethical considerations, performance metrics, digital data types, Excel skills, data management techniques, and the role of data in digital ecosystems and the data economy.

Topics covered:

- Data types & formats
- Architecture & platforms
- Data in a digital world
- The digital landscape
- Accessing & extracting data
- Sourcing data
- Migrating data
- Data legislation
- Data protection
- Data security
- Excel fundamentals

Live Session: 2 days | **Module Duration:** 6 weeks

TECHNICAL MODULES

The technical modules focus on the knowledge and skills required of learners undertaking the Microsoft Data Essentials programme.

Module 2: From Data to Insight

This module covers essential concepts and practical skills related to data formats, manipulation, aggregation, blending, filtering, and trend analysis. Through hands-on exercises and theoretical study, participants will gain proficiency in handling and analysing diverse datasets.

This module also introduces how to communicate data effectively through real-world and industry relevant scenarios

Topics covered:

- Importance of data formats
- Collate, format and save data
- Effective filtering
- Blending data
- Data manipulation
- Identifying trends
- Value of data to business
- Data type, structure and understanding patterns
- Excel formulas
- Power queries

Live Session: 3 days
Module Duration: 12 weeks

Module 3: Improving Data Quality

This module will focus on the practical aspects of how to validate data that you have sourced, what are the common issues found in data, how to answer business data questions, how to clean data and how you would audit the results of your data.

Additionally, this module will delve into the crucial aspects of data legislation, security and ethics, providing learners with a comprehensive understanding of safeguarding sensitive information and ensuring ethical and lawful handling practices throughout the data lifecycle.

Topics covered:

- Data quality issues;
- Misclassification
- Duplicate entries
- Spelling errors
- Obsolete data
- Compliance issues
- Interpretation/ translation of meaning
- Validating data
- Importance of data accuracy
- Legal and regulatory requirements
- Data protection
- Data security
- Intellectual Property Rights (IPR)
- Data sharing
- Marketing consent
- Personal data definition
- The ethical use of data
- Good data management

Live Session: 2 days | **Module Duration:** 12 weeks

Module 4: Statistics for Decision Making

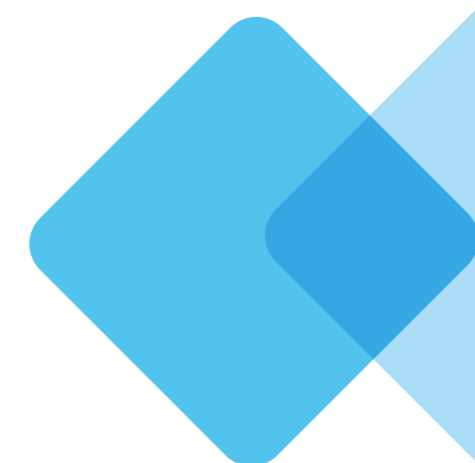
This module will focus on statistics for decision making.

Learners will gain insights into algorithms and various statistical techniques and metrics such as: averages, variability, correlation, linear regression, hypothesis testing, p-values as well as practical application of different statistical methods.

Topics covered:

- Evidence based decision making
- Data accessibility
- Algorithms
- Statistical methods
- Data modelling
- Normalising data
- Value of data and emerging technologies
- Use of statistics in business
- Decision making
- Excel for structured and unstructured data

Live Session: 3 days | **Module Duration:** 12 weeks





Module 5: Storytelling and Visualisation

This module will focus on how to have useful data conversations, how to communicate insights based on audience and how to identify the correct medium to use when telling your data story.

This module also explores communication methods including how to communicate meaning and how to produce vivid and effective technical documents.

Topics covered:

- Communication methods
- Communicating data to different audiences
- Technical documentation
- Presentation tools
- Communication tools
- Collaborative working technologies
- Data visualisation
- Creating a narrative
- Storytelling in Data

Live Session: 2 days
Module Duration: 12 weeks

Module 6: From Data Citizen to Data Specialist

This module will focus on the future of data, how emerging technologies will support business growth across the globe and your personal development.

Topics covered:

- The future of data
- Introduction to AI tools
- Professional development and next steps
- Preparation for EPA: scenario demonstration

Live Session: 2 days
Module Duration: 6 weeks

Additional module: Microsoft Office Specialist: Excel Associate

We are including the MO-200 exam along with the digital resources that are needed to be able to pass the exam.

This exam measures competency in the fundamentals of creating and managing worksheets and workbooks, creating cells and ranges, creating tables, applying formulas and functions, and creating charts and objects.

The exam covers the ability to create and edit a workbook with multiple sheets and use a graphic element to represent data visually.

Workbook examples include professional-looking budgets, financial statements, team performance charts, sales invoices, and data entry logs.

Gateway and end-point assessment Consolidation, preparation and assessment (Online)

This final component will get learners ready to go through the 'gateway'.

The apprenticeship gateway is an internal QA process. It will ensure that your learner's work is ready to be assessed by EPAO. This exists to increase their chances of success.

At this pre-gateway stage learners will:

- Consolidate and submit their portfolio
- Conduct a mock EPA

In addition to the items above, learners must have successfully completed all the Functional Skills exams (except exempt learners).

Once learners have met all the above criteria, they will go through the gateway. When approved, it takes up to 3 months from gateway to achievement.

During this time, learners will:

- Complete the scenario demonstration and questioning
- Complete their professional discussion, which is underpinned by their portfolio

Qualifications earned



- Data Technician Level 3 Apprenticeship
- **Exam:** Exam MO-200 Microsoft Excel (Excel and Excel 2019)
- **Certification:** Microsoft Office Specialist: Excel Associate (Excel and Excel 2019)

LEARNING OUTCOMES

Apprentices will be assessed on 3 key areas; their ability to convey knowledge, their ability to demonstrate practical skills and their capability of displaying professional workplace behaviour. These will be developed during an apprentice's learning journey, with the goal of displaying all of these competencies during their assessment.

These knowledge, skills and behaviour points ensure rounded development, as the standards provide a greater emphasis on the importance of both technical and soft skills in the workplace.

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
- K6: The value of data to the business how to undertake blending of data from multiple sources
- 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 and the ethical use of data
- K14: The significance of customer issues, problems, business value, brand awareness, cultural awareness/ diversity, accessibility, internal/ external audience, level of technical knowledge and profile in a 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, 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

BEHAVIOUR

- 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

HOW TO GET READY FOR THE END-POINT ASSESSMENT

We want to deliver memorable learning experiences, whilst developing learners with well-rounded skillsets, ready to meet their professional requirements.

To ensure we are achieving this goal consistently, it is important for learners, digital learning consultants and employers to work together to ensure learners are supported to succeed in their apprenticeship's end-point assessment (EPA).

In this section we outline a number of guidelines which intend to provide a framework so that this can be achieved in a consistent way.

Preparation for the end-point assessment starts from day one.

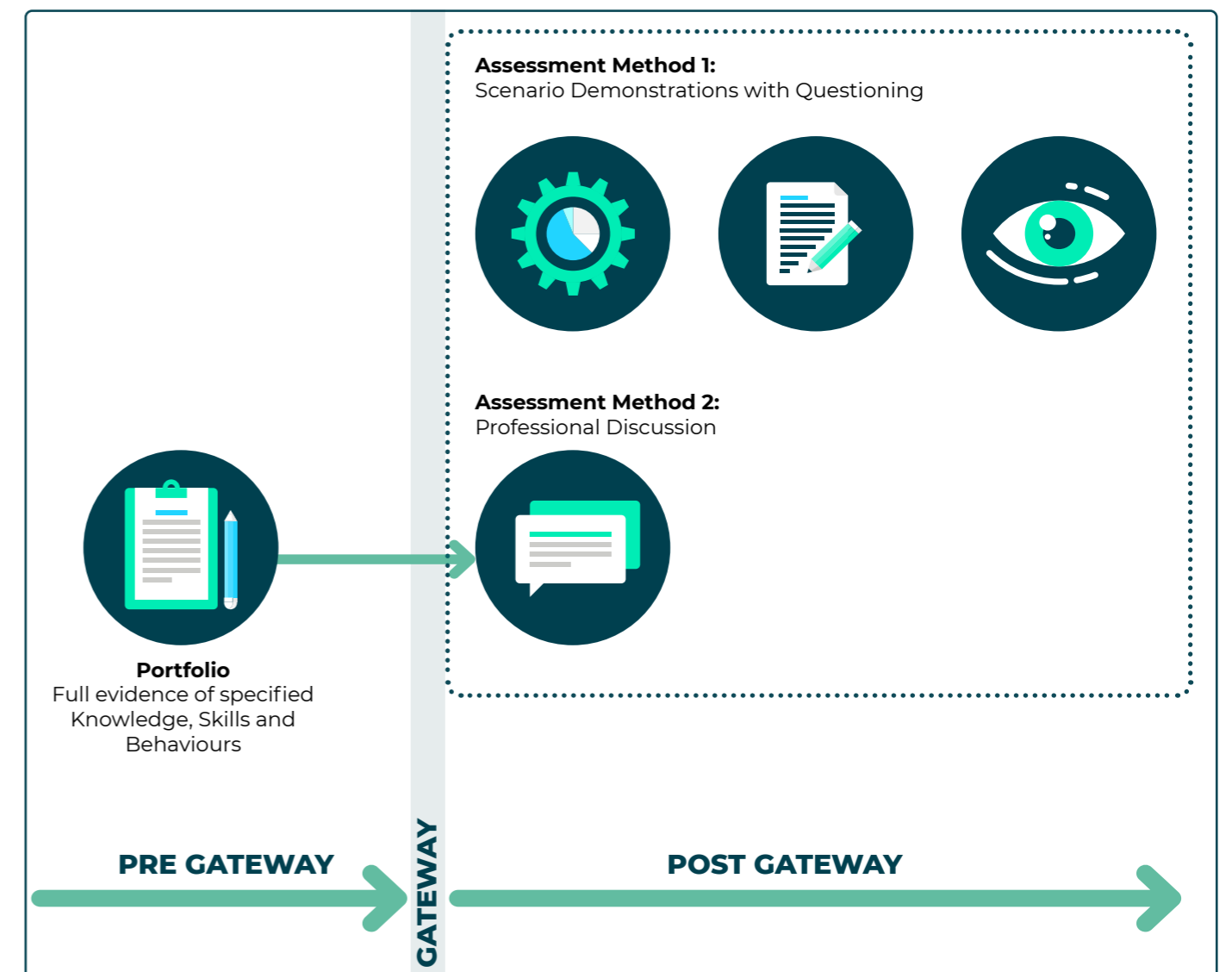
STAYING ON-TRACK THROUGHOUT THE PROGRAMME

Learners and employers should start preparing for EPA from the start of the programme. Employers will need to ensure that learners are given the right opportunities at work to develop and prove the knowledge, skills and behaviours in the standard.

For this reason, it is very important to keep learners, digital learning consultants and employers informed about the programme progress. It is critical to the success of the apprenticeship programme that all of the above work together to ensure that each learning journey is kept on-track avoiding further interventions (and time commitment) whenever possible.

To help learners with this, we have created two guiding documents – a programme timeline, and a progress review map – so progress can be checked against it, at any time. Any progress deviations above 15% will be reviewed on a case-by-case basis. This is to ensure the apprenticeship is progressing in a timely manner.

HOW THE EPA IS GRADED



Market defining funded learning programmes delivered digitally with leading-edge technology

DIGITAL BY DESIGN

We provide an award-winning approach for the delivery of our apprenticeship programmes called, Digital by Design (DxD).

Launched in 2020, DxD programmes are not just 'claiming' to be digital delivered, but provide a fully integrated online and digital learning experience for the 21st century. Intuitive technology blends and drives the user experience whilst Digital Learning Consultants guide learners through blended learning and cloud-based pathways.

We provide unrivalled response times to queries and turnaround times on submission feedback, resulting in learners keeping on track (98%) and exceptional completion rates. Don't just accept ordinary – experience real digital learning.

CONTINUED PROFESSIONAL DEVELOPMENT



Learners on QA's digital apprenticeship programmes uniquely benefit from full access to Cloud Academy, our world-leading digital learning platform.

Cloud Academy offers learners over 10,000 hours of additional learning content such as videos, quizzes and hands on labs in disciplines including Agile Development, Big Data, Cyber Security, Cloud (AWS, Azure, GCP), DevOps, Project Management and much more.

Learners on the Microsoft Data Essentials L3 programme have access to hands-on labs and sandbox environments enabling them to safely practise new skills before confidently applying them in the workplace. Furthermore, Cloud Academy provides learners with access to specific learning pathways and certifications to achieve continued development.



FOR MORE INFORMATION, PLEASE CONTACT

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V1.1 APRIL 2024

This information is correct as of publishing in APRIL 2024