# Data Foundations Level 3 Apprenticeship.

Programme guide



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### Data literacy is no longer a luxury, it's a necessity.

Businesses have more data available to them than ever before. And in one way or another, data touches every person's role in an organisation. As core business functions such as sales, HR, commercial, procurement, operations and finance acknowledge the rapid growth of data in their fields, demand for foundational data skills across all business areas is rocketing.

#### The UK's data skills challenge

#### Companies have lots of data but limited insights

70% of organisations claim they're receiving data faster than they can analyse it

#### Use of basic data tools is restricted

Most Excel users can only use 10% of its functionality

#### There's a digital skills gap

67% of UK companies have unfilled digital vacancies

#### Recruiting the right candidates is highly competitive

42% of employers are finding it difficult to attract candidates with the technical skills they need



# We're your strategic talent partner.

Workforce planning is more complex, more uncertain, and more crucial than ever before. Critical skills shortages means simply recruiting talent is no longer sustainable.

BPP understands these challenges, which is why we are more than just a training provider. We're your strategic talent partner.

#### We train the skills UK businesses need

BPP is a leading apprenticeship training provider offering over 35 apprenticeship standards across the critical skills gaps facing UK employers today.

### We don't just train for the here and now

We help you to workforce plan, creating talent pipelines that bring stability and certainty for the future.

#### We build skills at every level

Our apprenticeships range from entry level 2 to specialist master's level 7, ensuring the right talent in the right place at any level.

#### We take a holistic approach

Whether businesses need to upskill, reskill, succession plan, or find better ways to retain existing talent, we work with them to find the right balance.

### We are trusted by experts to be experts

BPP is the trusted education partner for leading organisations across a range of industries.

### We're experts in data.

Keeping pace with the rapid rate of technological change can be a challenge. The constantly evolving skills landscape means your organisation may find itself having to understand the current skills and proficiencies in your business while simultaneously trying to anticipate those you will need in the future. This is where the BPP Education Group can help.

#### We listen, advise and guide

Different areas of your business use data and data analysis in different ways. That's why we've developed apprenticeships that are specific to business functions and roles.

#### We teach how to solve problems

Our applied data training is developed by experienced data scientists from across industries and based on real-world business case-studies. We don't just teach to learn, we teach so apprentices can make an impact in your organisation.

#### We deliver commercial training

With data apprenticeships designed and delivered by industry experts, our programme content reflects the relevant and practical application of data in business, rather than just theoretical academic knowledge.

#### We focus on content quality

We bolster our data training with dedicated masterclasses and short courses designed to offer greater depth in specialist areas associated with data – whether that's specific tools such as Tableau and Google Analytics, or better storytelling to influence stakeholders.



## **Level 3 Data Foundations** Apprenticeship.

Our Level 3 Data Foundations helps build foundational skills and knowledge across your organisation that shapes data-driven decision making.

The programme is designed for anyone across the business who works with large volumes of data on a daily basis - this could be people from your operations, sales, commercial, procurement or finance teams.

It is suitable for anyone who wants to:

- · use Microsoft Excel to its full potential for more advanced data analysis
- learn how to use Power BI for effective data presentation
- gain the skills to effectively and accurately handle, interpret and report on data
- find a more efficient alternative to manually generating reports, reconciling information and analysing data
- · improve their technical literacy
- · learn how to make better informed decisions using data
- · move away from tedious, repetitive tasks so they can focus on more strategic work

For HR professionals and managers we also offer dedicated pathways with additional masterclasses, workshops and case studies that explore how data can be used specifically within their role.

- · Level 3 Data Foundations for HR
- Level 3 Data Foundations for Managers

#### How will it benefit your business?

- · Better decisions that support business success -When employees have a solid understanding of data, decision making is improved. Our programmes instil a data-centric culture across your organisation, focusing on how to draw actionable insights and reduce risk.
- · More efficient and confident teams Better knowledge of business-critical tools like Excel. Power BI, and the systems that feed the data going into them, help your teams do the things they usually do, but faster and more efficiently. The result? Your organisation saves time and effort.
- Identify potential to maximise business growth -Employees who understand data and how it links to business strategy and growth objectives can uncover trends and patterns that enable your organisation to identify new opportunities and potential for maximising business growth.
- Data that inspires action Encouraging employees to embrace dashboards enables them to tell data stories through engaging and easy to understand visuals that have far more impact than plain tables or paragraphs of unappealing text.
- Streamline business processes Your teams will save time and effort by learning how to automate recurring tasks and reports that were previously created manually.
- Improve employee satisfaction Widen participation in learning and development while quickly addressing any skills gaps through on-the-job training.



#### **Duration**

15 months

(12 months learning plus three months End Point Assessment)



#### **Qualification achieved**

Level 3 Data Technician Apprenticeship



#### **Programme delivery**

All teaching, coaching and workplace development is delivered online, providing ultimate flexibility and efficiency for your business



#### Typical study time required

Two hours of lectures per week, plus time off the job to apply learning and put newly developed skills into practice



#### Start dates

January, March, July, September and November



#### **Assessment**

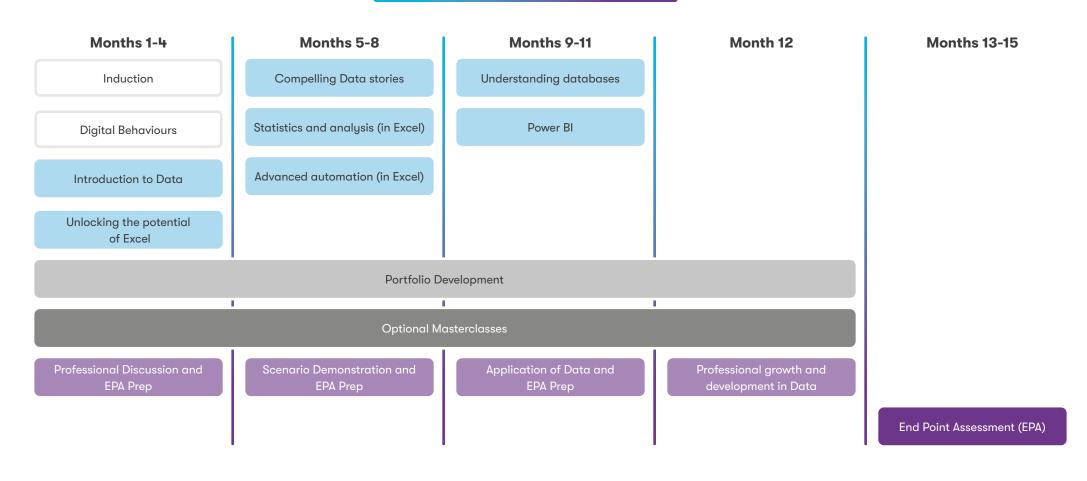
Apprentices are assessed against a standard set of competencies that are developed throughout the programme. End Point Assessment (EPA) includes scenario demonstrations with questioning, and a professional discussion underpinned by a portfolio.



#### Cost

This programme costs £12,000, which is covered in full through the Apprenticeship Levy. Employers who don't pay into the levy will only pay 5% of the full price, with the remaining 95% paid for by the Government.

### Data Foundations learner journey.





We also offer additional masterclasses, that run fortnightly. These masterclasses are designed to offer greater depth in specialist areas, so that apprentices can tailor the programme to suit their own needs.

# Career development Career development paths in Data Influencing senior leaders through Data storytelling Data in finance



Data-related topics

Al and ChatGPT

Finding and analysing market trends

## **Level 3 Data Foundations** Apprenticeship for HR.

Having the skills to analyse and visualise data is becoming increasingly important for HR professionals.

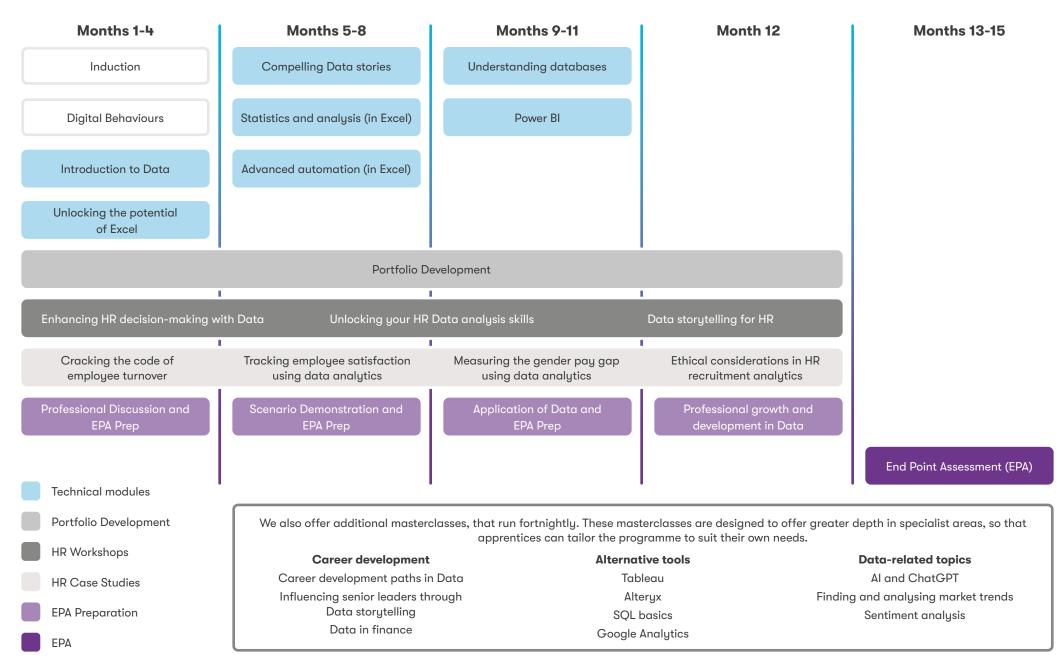
From tracking employee turnover and satisfaction, to monitoring training effectiveness and supporting workplace planning, HR teams now play a critical role in shaping an organisation's success. That's why we developed the HR Analytics pathway. Specifically created for HR professionals who work with data related to people and workforces, the programme is aimed at anyone who is:

- · working in HR and is a frequent data user
- interested in improving their technical literacy
- wants to learn how to make better decisions using data
- · using spreadsheets and spending a great deal of time generating manual reports and analyses

This pathway supports:

- improved trust in HR metrics across the organisation
- increased confidence presenting data to other departments
- more strategic conversations with the business
- improved profiling and talent management strategies
- enhanced problem-solving capabilities for participants
- elevated innovation in HR practices
- a forward-thinking departmental culture
- increased employee engagement by supporting development in digital and data skills

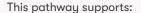
### Data Foundations for HR learner journey.



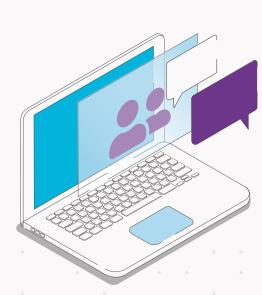
# Level 3 Data Foundations Apprenticeship for Managers.

The management pathway has been developed to reflect the typical data responsibilities of employees in a management role. It is suitable for anyone who is:

- responsible for managing teams, functions and processes where they need to effectively and accurately handle, interpret and report on data
- a frequent data user currently using spreadsheets and/or spending a lot of time generating manual reports, reconciling information and performing analysis
- looking to improve their technical literacy and learn how to make better informed decisions using data

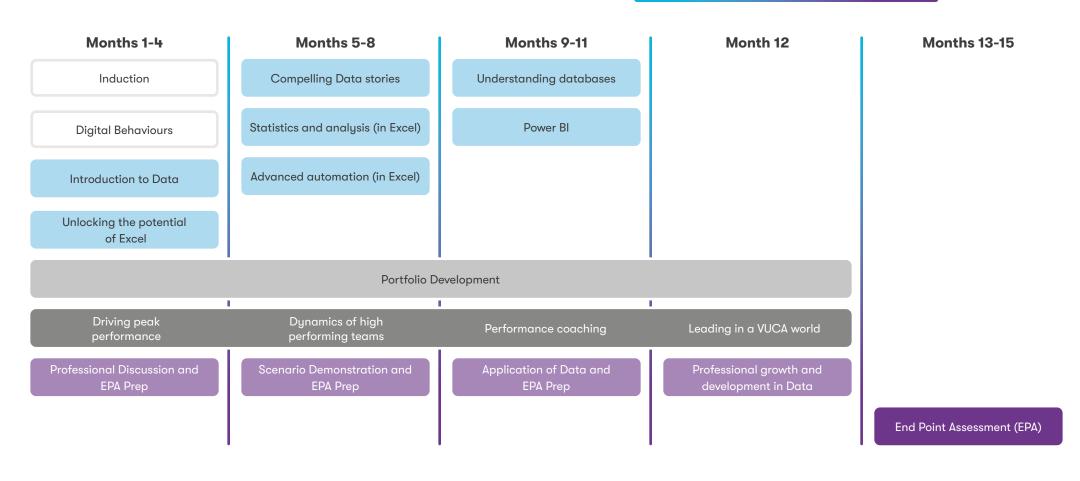


- · improved trust in metrics
- more accurate reporting and monitoring of KPIs and team performance
- increased confidence when presenting data to senior stakeholders
- more strategic and better-informed conversations with the business
- using data for better resource allocation, budget management, workload assignment and project prioritisation
- enhanced problem-solving capabilities: managers with data skills are better equipped to diagnose issues and implement effective solutions
- improved innovation in your team by fostering a forward-thinking departmental culture
- developing skills which are in demand today and expected to be the mostneeded skills to 2027, in order to stay effective in an evolving business landscape



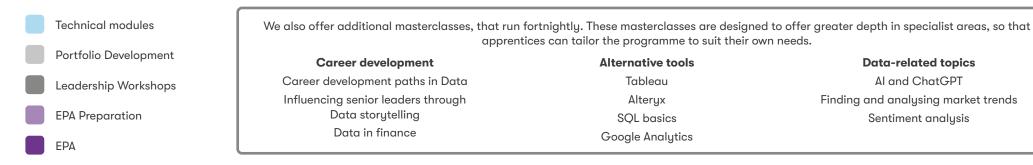


### Data Foundations for Managers learner journey.



**Data-related topics** Al and ChatGPT

Sentiment analysis



### Entry requirements and eligibility.

#### **Entry requirements**

These are set by individual employers, but must include:

- Over the age of 16 years
- · Not in full-time education
- Working at least 30 hours per week but no more than 40 hours per week
- Spending at least 50% of their working hours in England over the duration of their apprenticeship
- GCSEs grade A C in Maths and English (9 – 4 on the new grading system) or equivalent
- Applicants must be employed in a relevant role

#### Eligibility

To be eligible for the Level 3 Data Foundations apprenticeship, the following activities must form part of the learner's responsibilities within their role.

#### Job role checklist

- Source data from a collection of pre-identified trusted sources in a secure manner
- Collate and format data to facilitate processing and presentation for review and further advanced analysis by others
- Present data for review and analysis by others, using required medium for example tables, charts and graphs
- Blend data by combining data from various sources and formats to explore its relevance for the business needs
- Analyse simple and complex structured and unstructured data to support business outcomes using basic statistical methods to analyse the data
- Validate results of analysis using various techniques, e.g. cross-checking to identify faults in data results and ensure data quality

- Communicate results verbally and through reports and technical documentation, tailoring the message for the audience
- Store, manage and share data securely in a compliant manner
- Collaborate with people both internally and externally at all levels with a view to creating value from data
- Practise continuous self-learning to keep up to date with technological developments to enhance relevant skills and take responsibility for their own professional development



### Programme modules.

All learners undertake the following technical modules.

#### Months 1-4

#### Introduction to Data

This module introduces the basics of working with data, including the many different formats data can take, privacy and security concerns, and the various tools used by businesses to store, manage, and analyse data:

- An introduction to structured and unstructured data
- · Data privacy, security and ethics
- · Internal research skills
- · Data and analytics tools

**Expected impact:** Understand the different types of data and tools your business uses, how they're used, and why data compliance matters

#### Unlocking the potential of Excel

Make everuday data handling tasks easier by accessing untapped potential in Excel. Learn techniques to seamlessly integrate data from various sources, then clean and refine it. Master pivot tables and harness the power of Toolpak to uncover powerful insights:

- · Handling data in Excel
- · Blending data
- Pivot tables
- · Data cleaning
- Formatting and templates
- Analysing data: introduction to Toolpak and statistics

**Expected impact: Master** more tools in Excel that allow you to do tasks quicker and more efficiently, saving you time and improving business outcomes

#### **Professional Discussion** Preparation

Learn how to apply the skills acquired in the first two modules, demonstrate this in the portfolio and bring them to life during the professional discussion.

Expected impact: Put your new skills into practice in your day-to-day role

#### Months 5-8

#### **Compelling Data stories**

Develop techniques to create compelling visuals that effortlessly illuminate trends, patterns, and outliers. Understand the role of dashboards and reporting and learn how to weave a powerful narrative around data, captivating the audience and boosting your impact within the organisation:

- · Basic charts: creation and design
- Pivot charts
- Principles of chart design: knowing your message, and using the right chart for your story
- · Gathering requirements and dashboard design
- · Data storutelling

Expected impact: Bring data to life through dashboards and visualisation, allowing you to explain complex problems as stories, enabling better decision making

#### Statistics and analytics

Build on foundational knowledge of Excel and harness more sophisticated features to interpret complex data like a pro, deriving actionable insights for a smarter, data-driven approach to business:

- Advanced Excel formulas and functions for data analysis
- · Connecting to external data sources
- · Data distributions
- Using the Analyze Data tool to produce histograms, correlations, and scatter plots
- · How to interpret biased data

**Expected impact: Deeper** analysis of complex data sets enables insight to be uncovered and action to be taken which might otherwise have been missed

#### Advanced automation in Excel

Automate manual processes and find efficiencies in a data management context. Delve into advanced features designed to help construct data models and craft stunning dashboards, which can be maintained effectively:

- Automation using macros and VBA
- Excel tables and forms
- · Build a data model with Power Queru
- · Automate data processing using Power Query
- Advanced Power Query skills: DAX, normalisation. fuzzy matching
- · Using Excel to build dashboards

**Expected impact: Spend** less time analysing data in Excel and more time implementing changes that drive business growth

#### Months 9-12

#### Power BI

Dive into the capabilities of Power BI and explore the software's dynamic capabilities. Discover how it empowers users across an organisation to transform raw data into captivating, actionable insights:

- Introduction to Power BI: features, capabilities and navigation
- Chart tupes in Power BI: bar, line, scatter, histogram
- · Data preparation with Power Oueru, metrics and scorecards
- · Engaging your audience with interactivity
- · DAX and an introduction to programming languages

**Expected impact: Better** understanding of trends and patterns in data which helps all audiences understand data, and what action needs to be taken next

#### **Understanding databases**

Build a foundational understanding of data storage in order to hold more informed conversations with data specialists across your organisation. Understand where data comes from. how it's stored, and why it matters. Explore the advantages, disadvantages, and associated risks of various approaches to data management:

- · Sourcing data
- · Data modelling and normalisation
- Database sustems: warehouses, types of databases, and relational databases
- Introduction to SOL

**Expected impact: Cleaner** data that improves analysis, reporting accuracy and organisational visibility when looking at a single source of truth

#### **Application of Data**

A mock scenario to demonstrate experience tackling a work-based scenario that directly prepares learners for the End Point Assessment.

Expected impact: Put your new skills into practice in order to help prepare you for EPA

#### **EPA Preparation**

#### Scenario Demonstration

Apply the analytics skills acquired in the first five modules to a practical workbased scenario.

Expected impact: Put your new skills into practice in your day-to-day role

#### Professional growth and development in Data

Tutor-quided sessions designed to prepare students for the End Point Assessment.

**Expected impact:** Preparation for successful completion of EPA

#### Portfolio Development

Throughout the apprenticeship, learners will collate evidence from workplace activities and projects to build a portfolio. This demonstrates the knowledge, skills and behaviours gained and how they have been applied effectively in the job role. The portfolio will be the basis of the professional discussion at End Point Assessment.

Our Coaches work with the apprentice and their line manager to understand the best opportunities in the workplace to showcase and evidence their new skills. while also contributing to organisational goals.

### **End Point** Assessment.

We don't leave End Point Assessment preparation to the last minute. We prepare learners continuously throughout the apprenticeship, drawing on learning at each stage.

#### Scenario demonstrations with questioning

Duration: 90 minutes

- One scenario requiring the apprentice to conduct data gathering operations
- One scenario requiring data analysis and validation operations

#### **Professional discussion underpinned** by a portfolio

Duration: 60 minutes

The apprentice will discuss their portfolio of evidence to demonstrate how they have met the required Knowledge, Skills and Behaviours (see page 13).

Learners take a Professional Discussion module during the programme to help them prepare for this part of EPA.

### Learning outcomes.

Apprentices that successfully complete the Level 3 Data Foundations apprenticeship will be able to demonstrate and practically apply the following knowledge, skills and behaviours within 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, nonverbal, 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. 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 eternal 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 data sets
- 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
- Só: 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
- \$13: 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-ofdate 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
- \$18: 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

### The BPP learning experience.

### Business simulations and applied learning

We use professionally relevant case studies and custom-built platforms which replicate those used in practice, meaning your employees benefit from an interactive, high impact learning experience.

#### Market leading delivery

Online Classroom Live is our premium study experience, where students undertake their training, as well as accessing online events and masterclasses. It uses Adobe Connect's market-leading software to deliver interactive features that replicate a real-life environment for flexible, connected learning.

#### Everything at the click of a button

Our virtual learning environment, The Hub, offers 24/7 access to resources including timetables, key dates and learning materials, as well as providing updates and announcements. It is also where apprentices can access additional learning resources, including LinkedIn Learning and Pluralsight, to help them:

- extend beyond the core syllabus
- branch out into multiple different disciplines and topic areas
- develop practical skills they can link back to their role
- take advantage of continuous learning and extension

#### A fully supportive environment

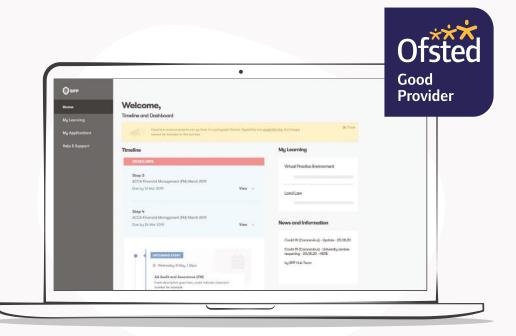
Our facilitators are specifically recruited for their industry experience and passion for training. By bringing real-life work-based examples into sessions and sharing their experiences, learners understand how the concepts covered on the course apply in business. Plus our facilitators, Safeguarding team, and Learning Support team are always on hand to help apprentices with any queries they may have.

#### Subject-experienced skills Coach

We recruit our Coaches for their practical industry experience and specialist skills in the programmes they lead. During the course, apprentices attend several coaching interventions, including monthly one-to-ones and 12-weekly formal progress review meetings.

#### Individual learning plans

Every apprentice receives tailored support to help them stay on track and make the progress that will deliver business results. This includes personalised objectives to stretch and challenge them, and additional learning needs support if/when needed.



#### An innovative learning framework

All our training solutions use our innovative and unique learning framework, which focuses on career success. We support apprentices through five key stages in their training:

#### 1. Prepare.

Develop the foundational knowledge which underpins the course

#### 2. Apply.

Learn how the knowledge is relevant to real-life tasks

#### 3. Collaborate.

Shape and refine understanding through discussion, testing, and carrying out practical and realistic tasks

#### 4. Consolidate.

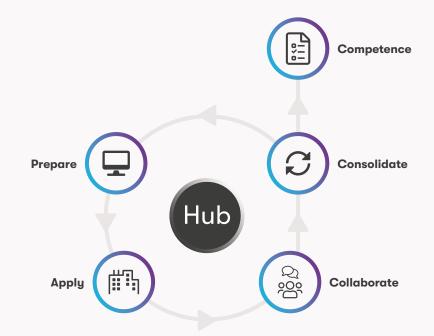
Practise and complete tasks and activities to embed new knowledge in the long-term memory

#### 5. Competence.

Complete the post-course competence tasks to finish the programme

#### A unique approach to delivering apprenticeship programmes

We ensure your employees develop practical skills so your apprenticeships have impact from day one. By using Al-driven digital platforms, we create personalised learning paths that help learners progress through their studies. As our programmes are entirely online, learners can study at their own pace in bite-sized modules, and avoid having to take time out of the office for face-toface time in the classroom.



## **Supporting** learners and line managers.

#### Learner support

- Tutor: helps with syllabus queries, technical subject questions, day-to-day contact and support, as well as leading a weekly webinar to help apprentices understand technical concepts and the work-based application of technical skills
- Trained Coach (Subject Matter Expert): conducts progress reviews, provides activity feedback. Specially trained to help students grow in confidence and address course-related stress
- The Hub: 24/7 online access to programme details, professional qualification resources, skills and behaviours resources as well as the place to submit course activities for marking and a forum to ask tutor questions

#### Line manager support

- Webinar: introductory session giving an overview of the programme
- Reporting: get updates on progress, receive minutes from progress reviews, and liaise with our dedicated Apprenticeship team



Apprenticeships are a great way to recruit new talent into your business, but did you know they can also be used to train and upskill existing staff?

However your organisation uses apprenticeships, the potential benefits are clear:

- Grow your workforce cost-effectively
- Strengthen skills and capability across your teams
- Harness new and innovative ideas from fresh eyes
- Build your talent pipeline and future proof your business

#### Free recruitment service

If you're considering recruiting a new apprentice into your business, our free recruitment service helps find the right person in just a few easy steps:

- We take time to understand your requirements, whether that's existing skills, experience or simply a great attitude
- 2. We advertise your role and gather CVs
- 3. We carry out first-round telephone interviews to create an initial shortlist of candidates

- 4. We record and share second-round video interviews with shortlisted candidates so you can get a feel for them and choose who you want to interview
- 5. We offer free Manager Awareness sessions to line managers, talking through what to expect and sharing useful tips on getting the most out of the apprenticeship experience

If you're thinking of recruiting a number of apprentices, or have an apprenticeship scheme already in your business, we can organise assessment centre days and work with you to build the right selection process for your needs.





If you have any questions, or require any more information visit **bpp.com**, or call **03300 603 100**.

Disclaimer: This information is accurate as at the date of publication, October 2023. It is subject to change. This document is for guidance only and does not form part of any contract. For more, visit bpp.com.

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