

# Data Technician.

## Level 3 Apprenticeship

As part of the programme, you will be expected to meet the Knowledge, Skills and Behaviours outcomes detailed below.

Your line manager will need to demonstrate how you will meet these outcomes during your programme, by completing a form during the application process.

### Occupational Duties

- Source data from a collection of already 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 e.g. 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 to ensure data quality
- Communicate results verbally, through reports and technical documentation and 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 own professional development

### Technical Knowledge and Understanding

- 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
- How to access and extract data from a range of already identified sources
- How to collate and format data in line with industry standards
- 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
- 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
- The value of data to the business
- How to undertake blending of data from multiple sources
- 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
- How to filter details, focusing on information relevant to the data project
- Basic statistical methods and simple data modelling to extract relevant data and normalise unstructured data
- 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
- Different methods of validating data and the importance of taking corrective action
- Communicating the results through basic narrative
- 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
- 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
- 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, Internet of Things (IoT), customer centricity
- Different learning techniques, learning techniques and the breadth and sources of knowledge
- Awareness to manage their effectiveness in meeting the objectives of those receiving coaching and, where relevant, the sponsor

### Underpinning Skills, Attitudes and Behaviours

- Source and migrate data from already identified different sources
- Collect, format and save data sets
- Summarise and explain gathered data
- Blend data sets from multiple sources and present in a format appropriate to the task
- Manipulate and link different data sets as required
- Use tools and techniques to identify trends and patterns in data
- Apply basic statistical methods and algorithms to identify trends and patterns in data
- Apply cross checking techniques for identifying faults and data results for data project requirements
- Audit data results
- Demonstrate the different ways of communicating meaning from data in line with audience requirements
- Produce clear and consistent technical documentation using standard organisational templates
- Store, manage and distribute in compliance with data security standards and legislation
- Explain data and results to different audiences in a way that aids understanding
- Review own development needs
- Keep up to date with developments in technologies, trends and innovation using a range of sources
- Clean data i.e. remove duplicates, typos, duplicate entries, out of date data and parse data (e.g. format telephone numbers according to a national standard) and test and assess confidence in the data and its integrity
- Operate as part of a multi-functional team
- Prioritise within the context of a project
- Manage own time to meet deadlines and manage stakeholder expectations
- Work independently and take responsibility
- Use own initiative