

# THE APPRENTICE and TRAINING PARTNERSHIP

## LEVEL 4 DATA ANALYST

### Programme Overview:

The primary role of a Data Analyst is to collect, organise and study data to provide business insight. Data analysts are typically involved with managing, cleansing, abstracting and aggregating data, and conducting a range of analytical studies on that data. They work across a variety of projects, providing technical data solutions to a range of stakeholders/customers issues. They document and report the results of data analysis activities making recommendations to improve business performance. They have a good understanding of data structures, database systems and procedures and the range of analytical tools used to undertake a range of different types of analyses.

### Entry Requirements:

Individual employers will set the selection criteria, but this might include five GCSEs and/or A levels; a Level 3 Apprenticeship; other relevant qualifications and experience; or an aptitude test with a focus on functional maths.

### Initial Assessments:

An initial assessment of Maths and English will be carried out for all apprentices using an approved diagnostic tool (BKSB, ForSkills); this will include Initial Assessment and full Diagnostic of knowledge in Maths and English to gauge the level at which the apprentice is working. This will enable us to support the apprentice and structure training provision.

### Who is it for?

The Data Analyst Level 4 Standard is suitable for individuals who are working in a supervisory data analyst role. They may have key responsibilities which can include:

- Data Analyst
- Data Manager
- Data Scientist
- Data Modeller
- Data Architect
- Data Engineer

### Delivery Model:

A minimum of 20% of the apprenticeship training takes place off-the-job and is flexibly delivered to suit your business with either classroom training and/or workshops in the workplace or block-training or day-release at our centre, with the remaining time being spent in the workplace.

A full timetable for training, ongoing assessment and End-Point Assessment will be issued to both you as the employer; and the apprentice, once the delivery model and training elements have been agreed.

On Programme Assessment will take the form of progress reviews with the trainer, employer and apprentice at least every 12 weeks. Feedback with ongoing development will include additional learning materials, resources and training delivered through the apprentice's e-portfolio OneFile; to which employers have access to view the progress and the development of each apprentice.

### End Point Assessment:

As the apprentice progresses through the apprenticeship, the employer and training provider will agree the apprentice has met the Standard and be ready for End Point Assessment. This is called the 'Gateway' and will trigger End-Point Assessment.

This is carried out by a Qualified Independent Assessor by an Approved External Awarding Organisation and will test the knowledge and competencies of the apprentice using a range of methods, these can include; an interview, scenarios with questions, portfolio of evidence sampled, professional discussion, watching a presentation of the apprentice's evidence plus other methods.

The Independent Assessor will make the final judgement as to whether the apprentice has fully met the requirements of the Standard. Grading will also be awarded with a maximum mark of 100, this will be awarded by the Independent Assessor based on the apprentice's assessment. Grades awarded are distinction, merit, pass or fail. End-Point Assessment is normally carried out in the workplace.

## Programme Structure:

The programme is broken down into areas to ensure that each apprentice has a rounded knowledge of principles, techniques and technologies. This involves an understanding of knowledge, skills and behaviour; as well as managing self and delivering results.

### Technical Competencies

- Identify, collect and migrate data to/from a range of internal and external systems
- Manipulate and link different data sets as required
- Interpret and apply the organisations data and information security standards, policies and procedures to data management activities
- Collect and compile data from different sources
- Perform database queries across multiple tables to extract data for analysis
- Perform routine statistical analyses and ad-hoc queries
- Use a range of analytical techniques such as data mining, time series forecasting and modelling
- techniques to identify and predict trends and patterns in data
- Assist production of performance dashboards and reports
- Assist with data quality checking and cleansing
- Apply the tools and techniques for data analysis, data visualisation and presentation
- Assist with the production of a range of ad-hoc and standard data analysis reports
- Summarise and present the results of data analysis to a range of stakeholders making recommendations
- Works with the organisation's data architecture

### Technical Knowledge and Understanding

- The range of data protection and legal issues
- The data life cycle
- The different types of data, including open and public data, administrative data, and research data
- The differences between structured and unstructured data
- The fundamentals of data structures, database system design, implementation and maintenance
- The importance of the domain context for data analytics
- The quality issues that can arise with data and how to avoid and/or resolve these
- The importance of clearly defining customer requirements for data analysis
- The processes and tools used for data integration
- The steps involved in carrying out routine data analysis tasks.
- How to use and apply industry standard tools and methods for data analysis

## Underpinning Skills, Attitudes and Behaviours

- Use logical and creative thinking skills
- Use analytical and problem solving skills
- Work independently and to take responsibility
- Use own initiative
- Work with a range of internal and external people
- Communicate effectively in a variety of situations
- Maintain a productive, professional and secure working environment
- Ability to communicate effectively in a variety of situations
- Maintain productive, professional and secure working environment

The designated trainer will support the employer and apprentice throughout the programme as a single point of contact for questions and queries. This includes additional support for portfolio and project preparation, along with any advice and guidance needed.

## Qualifications:

- BCS KM1: Data Analysis Tools**
- BCS KM2: Data Analysis Concepts**

Additional Professional Certifications that can be taken with The Apprentice and Training Partnership to complement these job roles on completion of the knowledge units are;

### MTA Database Fundamentals

## Progression:

On completion, apprentices may choose to register with the BCS under the register of IT technicians to support their professional career development and progression.

## Next steps:

In order to create an apprenticeship that best suits your business requirements, we will meet with you to discuss the delivery of the programme and how the apprenticeship will be funded. We will provide ongoing support including:

- Search and selection of the right apprentices to meet your business requirements.
- Specifying the training modules to optimise 'in job' performance.
- A tailored service in order to seamlessly integrate with your apprentice managers.
- Updates and information regarding apprenticeship costs and funding.
- Support and guidance for the apprentice and employer from start to finish with one main point of contact for you throughout the whole apprenticeship.
- Employer and apprentice access to a comprehensive range of resources and support material via OneFile.
- Time-efficient visits for training and assessment to work around you.
- Industry specialist qualified trainers and assessors.