Institute for Apprenticeships & Technical Education

DATA ANALYST

Reference Number: ST0118

Details of standard

Role Profile

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

Typical Job Roles:

Data Analyst, Data Manager, Data Scientist, Data Modeller, Data Architect, Data Engineer

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.

Technical Competencies

Be able to undertake the following in line with organisational procedures and under supervision

- 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

- Logical and creative thinking skills

- Analytical and problem solving skills

- Ability to work independently and to take responsibility

- Can use own initiative

- A thorough and organised approach

- Ability to work with a range of internal and external people

- Ability to communicate effectively in a variety of situations

- Maintain productive, professional and secure working environment

Qualifications

Apprentices must achieve the vendor or professional qualification, from the right hand column in the table below (currently this is only the EMC: Data Science Associate). This exempts the knowledge module in the left hand column. Apprentices must also achieve the Data Analysis Concepts Knowledge Module.

The content of both knowledge modules are summarised below and further details are available in the occupational brief available from the Tech Partnership at www.thetechpartnership.com/apprenticeship/dataanalyst

Knowledge Modules	Vendor or Professional Qualifications
Data Analysis Tools (for Level 4 Data Analyst	EMC: Data Science associate
Apprenticeships)	No other vendor or professional qualifications mapped at this point in time
Data Analysis Concepts (for Level 4 Data Analyst	None applicable at this point in time
Apprenticeships)	

English and Maths

Level 2 English and Maths will need to be achieved, if not already, prior to taking the end point assessment.

Professional Recognition

This apprenticeship is recognised for entry onto the Register of IT Technicians confirming SFIA level 3 professional competence and those completing the apprenticeship are eligible to apply for registration.

Duration

The duration of this apprenticeship is typically 24 months.

Level

This is a level 4 apprenticeship.

Review Date

This standard will be reviewed in December 2017.

Find an apprenticeship

Postcode (optional)

Version log

VERSION	DATE UPDATED	CHANGE	PREVIOUS VERSION
1	22/09/2017	Initial Creation	N/A