Lincoln College
Lincoln / Newark / Gainsborough

DATA ANALYST
APPRENTICESHIP STANDARD

Standard Code ST0118
Course Level 4
Day Release
Funding Level £15,000
Duration 27mths including EPA

Course Description

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 include: Data Analyst, Data Manager, Data Scientist, Data Modeller, Data Architect, Data Engineer.

Off the Job Training

A key requirement of an Apprenticeship is Off-the-job training. This must make up an average of 6 hours per week of the apprentice's working hours, over the total duration of the apprentice's planned training period. Off-the-job training must be directly relevant to the apprenticeship standard and must take place within the apprentice's normal working hours. The new learning must be documented and reflected on through the Learner Journal on their e-portfolio.

Entry Requirements

The Apprentice will need to be in a relevant role and show a willingness to undertake the knowledge, skills and behaviours required. They will also need to have 5 GCSES including

Maths and English (GCSE at Grade 4/C or above or equivalent) and/or A-levels or a Level 3 apprenticeship.

Apprentices may be required to attend an interview and undertake relevant skills assessments.

Once they have been accepted on to the programme all apprentices will be required to attend a Lincoln College Induction. Apprentices will require access to a tablet/computer to access their e-portfolio.

Knowledge, Skills and Behaviours

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.

Assessment

Assessment is done through a combination of practical tasks, written assignments, oral discussions and online tests throughout the programme. To ensure that we can support you to meet these, we will complete an in-depth initial skills analysis to ensure that we can tailor our delivery to meet these unique requirements. We will then use the most relevant delivery methods to support your learners which include:

- One to one coaching from a dedicated, professional assessor/instructor allocated to the learner for the duration of the programme.
- Work based assignments and projects to be completed in an e-portfolio. Case studies and in College course days as and when required for each learner.
- Job shadowing and mentoring.
- Formal review of progress every 12 weeks.
- Employer led in house training.
- Independent learning and research as directed by the assessor/instructor.

End Point Assessment

There will be an End Point Assessment (EPA) as the final stage of an Apprenticeship. The Apprentice must demonstrate their learning to an independent end point assessor and the overall grade available is distinction, merit, pass or fail.

End-Point Assessment includes:

Professional Discussion with Portfolio:
This assessment will take the form of a professional discussion which must be appropriately structured to draw out the best of the apprentice's competence. It will involve the questions that will focus on the KSBs mapped to this method of assessment. Containing evidence from real work projects which have been completed during the apprenticeship, usually towards

the end, and which, taken together, cover the totality of the standard, and which is assessed as part of the end point assessment.

Data Analysis Project:
The project is compiled after the apprentice has gone through the gateway.
The work-based project should be designed to ensure that the apprentice's work meets the needs of the business, is relevant to their role and allows the relevant KSBs to be demonstrated for the EPA.
The project will be designed to give the Data Analyst the opportunity to demonstrate the KSBs mapped to the assessment method within their day to day work and may cover the following project ideas to enable them to demonstrate competence.

Presentation with Questioning:

Apprentices will prepare and deliver a presentation that appropriately covers the KSBs assigned to this method of assessment.
The presentation will be based on the project and will cover:
- a summary of the main aspects of the project
- context/ implications/recommendations from the project
- practical application of knowledge, skills and behaviours
- business recommendations/ outcomes of the project, including visualisations
- any follow-on outcomes
- actions and next steps

Qualifications

Apprentices with a learner start date on the Data Analyst Apprenticeship that is on or after 10 March 2020 must take and submit evidence of achieving both KM1 and KM2.

Achievement of the Dell EMC qualification remains acceptable evidence for apprentices already on programme that are registered on and undertaking the Dell EMC qualification or have completed it. KM2 remains a mandatory requirement for all apprentices on this Data Analyst apprenticeship.

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

Progression

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.

Fees

As an Apprentice, you will pay no course fees. However, your employer may have to pay towards your training as well as providing you with a wage. All Apprentices are entitled to the national minimum apprentice wage within their first year of training from their employer, although they can, and often do, pay more. In the second and subsequent years of an Apprenticeship programme, if you are aged 19 or over, the national minimum wage for your age would apply [https://www.gov.uk/national-minimum-wage-rates]

If you are an employer and want to find out more information regarding employer contributions and any further costs related to the Apprenticeship programme, please contact our dedicated Apprenticeship team at employers@lincolncollege.ac.uk

Business Benefits

Employers have designed the Apprenticeship Standards to meet the needs of the sector and industry. Ensuring they include:

- Relevant Knowledge, skills and behaviours ensure that the Standard is relevant to the occupation.
- Widening participation Apprenticeship standards provide opportunities to employees that may not previously have been available.
- Development tools A cost effective way to train your employees to undertake specific roles in your business.
- Return on Investment On average, an apprentice who has completed their course will increase business productivity by £214 per week (CEBR, 2015).