APPRENTICESHIP

Data Analyst

Level 4

4

1 Apprenticeship Framework

The Level 4 Data Analyst Apprenticeship has been designed with employers in Wales to equip employees with the data analyst practitioner skills that they need to be able to develop and maintain data driven solutions, gather and cleanse data, validate and transform data, analyse data, create models from data, draw conclusions and report on data. This apprenticeship programme is designed to provide a robust vocational route to obtaining the skills and knowledge required to succeed as a data analyst.

The programme prepares learners for roles such as:

- Data Analyst
- Data Engineer
- Data Manager
- Junior Data Scientist

Who is this apprenticeship for?

This programme is for candidates who are engaged in the collection, analysis and reporting of data within an organisation and have a good level of experience and/or knowledge of the sector or those progressing from a relevant prior qualification. E.g. IT related A-level or a Level 3 apprenticeship in a related IT discipline.

On completion of this apprenticeship you will achieve the following:

- Agored Cymru Level 4 Diploma in Data Analytics
- Level 2 Essential Skill in Application of Number
- Level 2 Essential Skill in Communication

Benefits of the apprenticeship programme:

Industry-Recognised Qualification: The Level 4 Diploma in Data Analytics has been developed by Agored Cymru in conjunction with leading organisations in the Data sector to provide the practical skills in data collection, analysis, and visualisation skills that are needed, using industry-leading tools and techniques.

Practical and Relevant Curriculum: Our carefully crafted curriculum focuses on the core knowledge and skills required by a Data Analyst and is regularly updated to ensure you develop the skills industry values.

Flexible Learning Options: We understand that everyone's learning journey is unique. That's why we offer flexible learning options to suit your needs, allowing you to balance work commitments while progressing towards your qualification.

Experienced Tutors: Learn from industry experts and seasoned Data professionals who bring real-world insights into the classroom. Benefit from their extensive knowledge and practical experience, enabling you to gain valuable perspectives and learn best practices.

Networking Opportunities: Connect with like-minded professionals, expand your network, and engage in valuable discussions. The community of apprentices provides a platform for collaboration, allowing you to build relationships that can open doors to new learning and new opportunities.

Career Advancement: Enhance your career prospects with this recognised certification. The Level 4 Higher Apprenticeship can serve as a springboard for diverse Data roles, such as Data Analyst, Business Intelligence Analyst, Data Scientist, Data Engineer or Market Research Analyst. It also paves the way for further professional development, including the opportunity to progress to the second year of the Applied Data Science Degree Apprenticeship.

Course Delivery

- Typical duration of 24 months.
- Induction session for apprentices and for their line managers.
- 23x full day core technical skills and knowledge workshops.
- Supported by self-study online resources.
- One to One tutor coaching and assessment support sessions
- 4 Essential skills assessment days. (2 Preparation days and 2 Live Task days) **
- 2 hour long essential skills confirmatory tests. **

**Essential Skills activities are not applicable to apprentices with exemptions.

2 Level 4 Diploma in Data Analytics

Course Delivery

This element of the programme will be delivered through blended learning with learners attending full day knowledge and technical skills workshops delivered either face to face or virtually using Microsoft Teams across the 24-month duration of the programme.

Additional development and assessment support will be provided through regular 1-to-1 sessions with a member of the ALS delivery team. An ALS assessor will meet with the learner, either in the workplace or through digital means. (for example, Microsoft Teams) to provide coaching, advice and assessment support.

Learners will also be set tasks to complete between each visit which are tailored to the different needs of each learner and the workplace activities they are involved with.

Qualification Structure Summary

The Level 4 Diploma in Data Analyst consists of 8 units, with a total of 124 credits.

What you will learn

This programme is made up of a mixture of knowledge and competence units across a broad range of data analysis disciplines.

ALS Programme Units (124 credits)

Unit Title	Level	Credits
Develop Own Effectiveness and Professionalism	4	12
Principles of Data Management Infrastructure	4	18
Data Analysis Tools	4	18
Data Analysis: Data Science	4	24
Statistical Analysis of Data Sets	4	15
Principles of Information Governance and Assurance	3	15
Advanced Data Representation and Manipulation for IT	3	7
Programming for Data Analysis	4	15

Software Requirements

The ALS Training Advisor will complete virtual 121 visits to support progress and the achievement of the Higher Apprenticeship, the off the job learning will be delivered using a blended approach utilising Microsoft Teams for online learning and onsite at our Data Lab at Ocean Park House Cardiff.

At the end of each workshop module, you will be given assignments in line with the module you have just completed. Deadline date for submissions will also be provided and discussed.

To meet the requirements of the apprenticeship please see below a list of software, including links which you are able to download that you must have access to in order to enable a successful learning experience (please check with your IT dept before downloading if you are using company equipment).

Software:

Full access to the following standard software's/websites:
- **Microsoft Teams**
- **Microsoft Excel**
- **OneDrive**

Full access to the following bespoke software's and all of the libraries:
- **Anaconda** (1 Download)
- **R Studio** (2 Downloads)
- **Microsoft** SQL Server Management Studio (2 Downloads)
- **Power BI** (1 Download)
- **AWS** (Online) (0 Downloads)

Links:

https://www.anaconda.com/products/distribution
https://www.rstudio.com/
https://cran.r-project.org/bin/windows/base/
https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver16
https://www.microsoft.com/en-gb/sql-server/sql-server-downloads
https://powerbi.microsoft.com/en-us/downloads/
https://aws.amazon.com/

If there are any concerns regarding accessing the software above, please speak with your line manager and ALS contact who will endeavour to support you with an alternative solution.

Have any questions about our Level 4 Data Analyst Apprenticeship?

We are here to help. If you have any further questions or enquiries about the main qualification element of the programme, please contact **info@alstraining.org.uk**

3 Essential Skills Qualifications

When you agree to undertake an apprenticeship, you may be required to complete Essential Skills as part of your Apprenticeship framework.

Essential Skills Wales

The Essential Skills Wales (ESW) will be initially assessed via an online Wales Essential Skills Toolkit (WEST) Assessment. Where a Learner already holds an ESW certificate or equivalent qualification this can provide an exemption and learners will not need to complete that ESW element of the programme. Where a Learner is not exempt an Individual Learning Plan (ILP) will be generated from the initial assessment. The modules delivery will include independent learning via WEST, prior to guided learning sessions preparing the Learner for their assessment. ESWs are assessed via controlled tasks and confirmatory tests for Communication and Number, Digital Literacy is assessed via a controlled task and structured discussion.

Exemptions

If you already hold qualifications, these may be used as 'exemptions' towards your apprenticeship framework. As a result, you will be exempt from achieving that particular Essential Skill, if you wish. This will be discussed with you before you sign up with us and will also be followed up by your assessor before and during your first visit from us.

Have any questions about Essential Skills?

We are here to help. If you have any further questions or enquiries about Essential Skills element of the programme, please contact **info@alstraining.org.uk**