West Yorkshire Fire & Rescue Service

Job Description.

**Post Title: Data Engineer**

**Grade: Grade 7**

**Responsible To: Data Team Manager**

**Purpose Of Post: To design, build and maintain robust data pipelines and models that support enterprise reporting and analytics using Microsoft Fabric, Power BI and related technologies. The Data Engineer will work closely with Data Analysts and Data Quality Administrators to ensure data is accurate, accessible and optimised for performance and usability across the organisation.**

# Organisational chart.

# Main duties and responsibilities of the role.

1. Develop and maintain scalable data pipelines using Microsoft Fabric and other modern data engineering tools.
2. Design and implement data models and lakehouse architectures to support reporting and analytics needs.
3. Collaborate with Data Analysts to understand reporting requirements and ensure data structures support effective visualisation and analysis.
4. Work with Data Quality Administrators to ensure data integrity, consistency, and compliance with internal standards and external regulations (e.g. GDPR).
5. Integrate data from multiple sources including operational systems, cloud platforms, and third-party APIs.
6. Optimise data storage and query performance across the Microsoft ecosystem (e.g. OneLake, Synapse, Power BI).
7. Implement and maintain data governance practices including metadata management, lineage tracking, and access control.
8. Support the development of reusable datasets and semantic models for use in Power BI and other reporting tools.
9. Provide technical consultancy and support to internal teams on data engineering best practices.
10. Document data architecture, pipelines, and processes to ensure transparency and maintainability.
11. Stay up to date with emerging technologies and trends in data engineering and analytics.

# Organisational wide responsibilities.

1. Adherence to the[**NFCC Core Code of Ethics**](https://nfcc.org.uk/our-services/people-programme/core-code-of-ethics/%20Services%20England.pdf)and[**West Yorkshire Fire Service Values**](https://www.westyorksfire.gov.uk/sites/default/files/2023-03/WYFRS%20Core%20Values%20June22.pdf).

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1. To implement and promote the Authority’s:

* Health and Safety policies.
* Equality and Diversity policies.
* Information Security Management System policies.
* Safeguarding policies.
* Business continuity policy and contingency arrangements.
* Policies related to General Data Protection Regulation and Data Protection Act 2018.
* Commitment to maintaining our Customer Service expectations.

1. A satisfactory standard Disclosure and Barring check is required for the role.
2. This post has been designated a hybrid working post which means the postholder’s working time will be split between the workplace and home. The actual pattern and number of days at each will be agreed locally with the line manager and will be determined based on the service needs.

# Skills and experience requirements for this role

In the supporting statement section of the application form give clear, concise examples of how **you meet all of the Essential person specification criteria** (i.e. items you must be able to do from day one to be able to do the job), **identified as ‘Application’ in order to be shortlisted for this vacancy**. If a large number of applications are received, only those who also meet the Desirable criteria, identified as ‘Application’, will be shortlisted, i.e. criteria you need to do the job, but which could be learnt during training.

**Please list or number the** competency criteria below against which you are providing evidence/examples in order to structure your supporting statement in a well organised way.

There may be some criteria that are identified through ‘Selection Process’ only. **You will only be assessed on these criteria during the selection process and not from your application form**, this may involve tests, presentations, interview etc.

|  | **Experience.** | **Essential/Desirable.** | **Where identified.** |
| --- | --- | --- | --- |
|  | Experience designing and building data pipelines using Microsoft Fabric or similar technologies. | Essential. | Application & Selection Process. |
|  | Experience with data modelling, lakehouse architecture, and semantic layer design. | Essential. | Application & Selection Process. |
|  | Experience working with Power BI datasets and optimising data for reporting. | Essential. | Application & Selection Process. |
|  | Experience integrating data from multiple sources including APIs and cloud platforms. | Essential. | Application & Selection Process. |
|  | Experience working collaboratively with analysts and data quality teams. | Essential. | Selection Process. |
|  | Experience with SQL, DAX, and Python or other scripting languages. | Essential. | Application & Selection Process. |
|  | Experience in a public sector or blue light organisation. | Desirable. | Application. |

|  | **Education and Training.** | **Essential/Desirable.** | **Where identified.** |
| --- | --- | --- | --- |
|  | Qualification in data engineering, computer science, or equivalent experience. | Essential. | Application & Selection Process. |
|  | Certification or training in Microsoft Fabric, Azure Data Services, or Power BI. | Desirable. | Application. |
|  | Project management qualification or relevant experience. | Desirable. | Application. |

|  | **Special knowledge and skills.** | **Essential/Desirable.** | **Where identified.** |
| --- | --- | --- | --- |
|  | Strong problem-solving and analytical skills. | Essential. | Application & Selection Process. |
|  | Ability to communicate technical concepts to non-technical stakeholders. | Essential. | Application & Selection Process. |
|  | Commitment to data quality, governance, and security. | Essential. | Selection Process. |
|  | Understanding of GDPR and data protection principles. | Essential. | Application & Selection Process. |
|  | Ability to work independently and as part of a team. | Essential. | Selection Process. |
|  | Demonstrate commitment to and understanding of Equality & Diversity, NFCC Core Code of Ethics and WYFRS values. | Essential. | Selection Process only. |
|  | To hold and maintain a current full UK valid car driving licence. [Travel sometimes required between WYFRS premises]. | Essential. | Application & Selection Process. |

Job Description last updated: **August 2025**