



THE ROLE

Data Engineer

Department:	Performance & Analytics
Role Code:	P&A05
Grade/Role:	9
Responsible to:	Senior Data Engineer
Responsible for:	No line management responsibility
Date Revised:	December 2025

Job Purpose:

To protect and prevent loss of life, property, and the environment for Essex County Fire & Rescue Service (ECFRS) by providing service wide support for all data, including storage, processing and warehousing. Deliver value to the Service using any relevant data assets. Create an environment of innovation within the team through self-development and collaboration.

Main Duties and Responsibilities:

1. To Manage and build reusable data assets:

- Using relevant software, transform data to generate stable and repeatable data models for the entire service.
- Maintain documentation and ensure code is legible for future teams and recycling, maintain models.
- Capture requirements from customers and review with team to then provide updates to data assets based on requirements that come from customers.
- Research, and access external sources of data to meet customer and business intelligence needs.
- Create efficient data models to suit customer needs.
- Take ownership of models, documentation and training on how to best utilise them.

2. Deliver added value to the service using data products:

- Research and use the latest available technology to build solutions that solve problems in the Service using data.

Role Profile

- Focus on maintainability, efficiency, and overall positive outcomes for the customer.

3. Provide relevant data access:

- Ensure data assets are available for everyone who needs it across the Service whilst cognisant of GDPR and ethical data management principles
- Create open and readable documentation to make data accessible for customers.
- Maintain search tools with the details of the newly created data assets.
- Promote the use of data across our Service.

4. Define quality standards for data:

- Assure data quality metrics for the Service working to our data quality framework
- Support the refinement of data on a continual basis, particularly on slowly changing dimensions.
- Use data quality metrics to evaluate the performance of a source and track the effectiveness of changes.

5. Collaborating with Service departments:

- Maintain good relationships across the service to provide a consistent quality delivery.
- Gather requirements from customers, provide a space to help accurately express their requirements for data modelling.

6. Optimise and improve dataflow:

- Explore possibilities for optimising Extract Load Transform (ELT) processes for better performance or maintainability.

7. Develop the team:

- Support an environment that encourages transparency and innovation
- Provide support to less experienced members of the team.

Role Profile

- Create and achieve personal goals that lead to growth while simultaneously benefiting the Service.
- Set a good example; be a role model for less experienced members. Uphold standards for the team and encourage best practise.

8. Prioritisation and decision making:

- Prioritise against Service needs short and medium term; direct resource accordingly to meet deadlines and targets.
Balance workload and be aware of other team members BAU, support if needed.

9. Project planning and vision:

- Take ownership and responsibilities of project(s) when required.
- Provide updates on a consistent basis to team, highlight blockers and encourage feedback.
- Scope out requirements from customers to support project plans in line with agile methodologies.

10. Data science and advanced analytics:

- Support and shape the creation/expansion of a data science platform.
- Understand the aim of predictive methods and other advanced analytic tools.