Level 5 Data Engineer Apprenticeship Job Description

Role Purpose

This is a higher-level apprenticeship designed to develop advanced technical skills in data engineering while providing a valuable development opportunity for members of our community.

The focus of this apprenticeship will be on:

- Supporting the work of the council by contributing to the delivery of services and projects allocated and supported by a supervising manager
- Learning advanced knowledge, skills, and behaviours aligned with the Level 5 standard.
- Completing a programme of study equivalent to a foundation degree or HND.
- Learning to model Surrey County Council's Values
- Carrying out the role with enthusiasm, integrity and professionalism
- Learn how to design and implement systems that collect, process, and transform data into usable information for data analysts, business intelligence teams, and operational decision-makers.
- The primary aim is to make data accessible, accurate, and reliable so that Surrey Fire and Rescue Service can evaluate performance, improve resource allocation, and deliver timely intelligence to frontline firefighters during incidents.
- Support the development of automated data flows, replacing manual processes with scalable and repeatable solutions such as ETL (Extract, Transform, Load).
- Assist in integrating and maintaining data streaming systems, monitor performance indicators, and ensure the provision of clean, consistent, and secure data.

Work Context

- This is a hybrid role within the Data Insight Team at Surrey Fire and Rescue Service, based at Woodhatch Place in Reigate and reporting to the Senior Risk Intelligence Officer. Agile working is essential, with flexibility to work from home, at fire stations, and occasional travel across the county
- The role contributes directly to community safety and supports operational decision-making. The post-holder will be expected to act positively and professionally, even in challenging or time-critical situations, to help maintain the safety of firefighters and the public
- Strong communication and teamwork skills are vital, alongside problem-solving ability and attention to detail. The apprentice will collaborate closely with other data specialists and technology teams to deliver effective, reliable solutions that meet business requirements.

Representative Accountabilities

- Undertake a structured programme of study and practical work to achieve a nationally recognised Level 5 Apprenticeship
- To develop a working knowledge of Surrey County Council's policies and procedures in line with the requirements of the apprenticeship standard
- Provide high standards of performance to ensure that the service continues to operate efficiently and effectively
- Under supervision work closely with other team members to assist in a range of projects and

service developments.

- Through personal example promote the values and behaviours (including equalities) that underpin the Council's organisation strategy.
- Design and build data pipelines to collect, transform, and load data for analytics and reporting.
- Re-engineer manual data flows into automated, scalable ETL or streaming solutions.
- Support and manage data streaming systems, ensuring pipelines run optimally and efficiently.
- Ensure data is high-quality, accurate, transparent, and complies with governance standards and security standards.
- Monitor and analyse data system performance indicators, diagnosing and resolving issues promptly.
- Communicate data solutions clearly and effectively to non-technical stakeholders
- Collaborate with other technology teams to deliver integrated solution.
- Complete tasks to specification and deadlines, demonstrating initiative and accountability under supervision.
- Duties for all
  Values: To uphold the values and behaviours of the organisation.
  Equality & Diversity: To work inclusively, with a diverse range of stakeholders and promote equality of opportunity.
  Health, Safety & Welfare: To work alongside colleagues in the maintenance of a safe working environment reporting incidents, accidents, repairs and maintenance promptly and taking appropriate action as required. Adherence to safe working under the health and safety policy is required.
  To have regard to and comply with safeguarding policy and procedure as appropriate.

Education, Knowledge, Skills & Abilities, Experience and Personal Characteristics

- Ability to work towards and achieve a level 5 apprenticeship (equivalent to a foundation degree or HND)
- A Level 3 qualification (A-levels, BTEC, or a Level 3 apprenticeship)
- GCSE (or equivalent) at grades 9–4/A*–C in English and Maths (or Functional Skills Level 2).

Details of specific qualifications and/or experience required for role in line with role outputs

- Interest in data, technology, or analytics, with a willingness to learn and develop skills in these areas.
- Strong organisational skills and ability to meet deadlines calmly and efficiently in a fast-paced environment.
- Attention to detail and ability to critically self-evaluate
- Satisfactory standard DBS check

Role summary

This Level 5 apprenticeship is designed for individuals seeking to develop advanced technical skills through structured learning and practical experience. The role involves working as part of a collaborative team to support data-driven projects and service improvements. While tasks will initially follow established procedures, you will progressively take on more complex responsibilities as your skills develop. The position requires planning and prioritising both work and training activities, demonstrating initiative and accountability. Through on-the-job learning and formal study, you will build a strong foundation in data engineering, preparing for future roles within the organisation.