

## Job Description

### Lead Data Engineer

|                         |                                              |
|-------------------------|----------------------------------------------|
| <b>Salary:</b>          | Grade 8                                      |
| <b>Contract:</b>        | Full time, ongoing                           |
| <b>Location:</b>        | Canterbury Campus                            |
| <b>Responsible to:</b>  | Director of Planning, Insights & Improvement |
| <b>Responsible for:</b> | Data Engineer(s)                             |
| <b>Job family:</b>      | Administrative, professional and managerial  |

### Job purpose

The Lead Data Engineer will lead the collation, preparation and provision of data required to support business intelligence and operational (student journey) reporting across the university. Working with senior stakeholders to identify information requirements, and building data capability through the identification, collation and profiling of data from a wide variety of sources.

The role will be integral to enabling the University to successfully meet institutional and sector-wide challenges, both current and future by enabling the provision of timely, good quality and well governed management information and insight to support strategic decision-making. You will also be responsible for providing technical expertise across the University's data landscape including, ETL development, data-wrangling, -cleansing, -credibility checking, and design and creation of data models

### Key accountabilities

The following are the main duties for the job. Other duties, commensurate with the grading of the job, may also be assigned from time to time.

- Enhance the university's capacity for modelling and scenario planning to enable the University to understand its environment and strategic options.
- Design of data models to assist with robust longitudinal reporting and scenario modelling as required on all aspects of the applicant and student lifecycle and the University's education portfolio.
- Apply specialist technical skills to develop ETL and data preparation processes and performance metrics to facilitate the reporting and production of the management information, business intelligence and performance monitoring required to support strategic planning across the university.
- Support Data Architecture colleagues in monitoring data standards in relation to the preparation and provision of datasets and business intelligence reports, including the development of a business data glossary.
- Work closely with the Data Architect and Business Intelligence Manager to maintain and develop the data and reporting infrastructure and apply relevant strands of the University's Data Strategy.
- Communicate with internal stakeholders, providing expert guidance on data and supporting the enhancement of data literacy levels.
- Lead, motivate and develop Data Engineering staff, providing clear objectives and managing performance against these.
- Support the creation of a culture that is highly performance and contribution focused, built on a foundation of equality, diversity, belonging and inclusivity and that inspires people to bring their best every day.

## Key challenges and decisions

The following provide an overview of the most challenging or complex parts of the role and the degree of autonomy that exists.

- The role holder will need to understand complex data requirements of multiple stakeholders and play an active role as technical specialist in designing appropriate solutions. To do this, the role holder will be expected to work with stakeholders internally across divisions and departments within the University. They will need to have an understanding of the wider picture and how institutional level strategy and metrics need to align with both external evaluation (e.g. TEF, B3, APP) and internal organisational plans and targets.
- They will need to maintain a process of continuous improvement in the sourcing and preparation of data, and the provision of data to support report requirements underpinning operational and strategic decision making across the University.
- The Lead Data Engineer will need to effectively manage concurrent workstreams across the team, ensuring that technical staff are supported and empowered to develop and apply their expertise to provide greatest benefit in leveraging intelligence from the University's data landscape

## Facts & figures

The Lead Data Engineer will lead team of Data Engineer(s).

The provision of data models to underpin operational and strategic planning, KPI analysis and business intelligence impacts all staff across the University either directly or indirectly and informs strategic decision making.

Budgetary Responsibility: None

## Internal & external relationships

**Internal:** Data Architecture team, Business Intelligence team, Planning team, Senior management teams (both Academic and Professional Services), heads of sections in professional services areas

**External:** Key technical external contacts across the HE sector and any relevant data agencies, including OfS, JISC, HESA, UCAS.

## Health, safety & wellbeing considerations

This job involves undertaking duties which include the following health, safety and wellbeing considerations:

- Regular use of Screen Display Equipment
- Repetitive limb movements
- Conflict resolution
- Pressure to meet important deadlines such as might be inherent in high profile projects

## Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear evidence and examples in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

### Essential Criteria:

- Advanced knowledge and experience of ETL development and testing (SSIS, Alteryx, or similar) (A,I)
- Highly expert in data preparation and analysis, including extensive technical experience developing complex data modelling using a range of software solutions or languages (e.g. SQL queries, stored procedures, views etc, Alteryx, Qlik, Excel) (A,I,T)

- Advanced knowledge of database design and data modelling to support business intelligence reporting (SQL, Qlik) (A,I)
- Knowledge and experience of implementing and developing data governance considerations (documentation, meta data analysis, data lineage) (A,I)
- Excellent negotiating, influencing and communication skills (written and oral), including fostering productive relationships between different teams and providing specialist advice (I)
- Experience of managing a complex and changing workload, and the willingness to work flexibly respond to priorities and objectives that can change rapidly (I)
- High levels of aptitude, enthusiasm and experience for developing data analyses and metrics to support organisational performance monitoring frameworks (I)
- Strong commitment to principles of continuous improvement and the development and application of technical skills and strategies to best deliver organisational objectives (I)
- Strong understanding of data sensitivity and GDPR principles (I)
- Firm commitment to achieving the University's vision and values, with a passion for a transformative student experience and multidisciplinary, impactful research (I)
- Commitment to deliver equality, diversity and inclusivity in the day to day work of the role (I)

**Desirable Criteria:**

- Experience of successfully managing skilled technical staff, with well-developed leadership skills and a clear passion for developing motivated staff (A,I)
- Knowledge and experience of the UK Higher Education sector data environment including a strong understanding of the regulatory framework (A,I,T)

*Assessment stage: A - Application; I - Interview; T - Test/presentation at interview stage*