

# Position description

<b>Position title:</b>	<b>Developer, Data Engineer</b>
<b>School/Section/VCO:</b>	<b>Information Technology Services</b>
<b>Campus:</b>	<b>Mt Helen Campus. Travel between campuses will be required.</b>
<b>Classification:</b>	<b>Within the HEW Level 7 range</b>
<b>Employment mode:</b>	<b>Fixed-term appointment</b>
<b>Probationary period:</b>	<b>This appointment is offered subject to the successful completion of a probationary period.</b>
<b>Time fraction:</b>	<b>Full-time</b>
<b>Recruitment number:</b>	<b>848882</b>
<b>Further information from:</b>	<b>Mr Jeremy Egan, Team Leader, Infrastructure, Service Operations</b> <b>Telephone: (03) 5327 9571</b> <b>Email: <a href="mailto:j.egan@federation.edu.au">j.egan@federation.edu.au</a></b>
<b>Position description approved by:</b>	<b>Ms Sahar Oujil, Director, Information Technology Services</b>

**This position description is agreed to by:**

\_\_\_\_\_  
Employee name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**The University reserves the right to invite applications and to make no appointment.**

Warning: uncontrolled when printed.

Authorised by: Director, Human Resources  
Document owner: Manager, HR Shared Services

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## Position summary

Federation University's Data and Reporting and Information technology Services (ITS) departments have been endeavouring to transition from old and inadequate data infrastructure, to new, supported, streamlined and efficient data infrastructure. The Data Infrastructure project will expedite decommissioning of old and inadequate infrastructure, deliver further data analysis outcomes, which will lead into advanced analytical outcomes such as predictive analytics from University data and generate efficient, useable and valuable data assets that can be used for advanced analytical purposes to support the achievement of the University's strategic outcomes.

The Developer, Data Engineer ensures the ongoing management and development of the University's Data Infrastructure. By managing the data, data pipelines and software platforms that generate disparate data assets that are conformant to the University's Data Reference Model or external data sources. The Developer, Data Engineer supports the consumption of data by analytical and reporting consumers across the University. The Developer, Data Engineer will provide support for data preparation underpinning business intelligence, advanced analytics and provisioning of datasets to data analysts.

The Developer, Data Engineer acquires, models, ingests, and processes data from multiple external sources and operational systems into the University's Data Infrastructure. Imparting standards and conformation to the Data Governance policies.

## Key responsibilities

1. Develop and manage the University's Data Infrastructure by implementation and optimisation of data pipelines and assets that are housed in the Data Infrastructure and that conform to the University's Data Reference Model. Modelling operational data into data warehouse ready schemas for reporting and analytical purposes.
2. Work closely with key consumers of data assets within the University to ensure that the data assets meet the needs of the data consumers and are of a high quality and instil confidence in the Data Infrastructure for reporting and analytical purposes.
3. Monitor and ensure the data pipelines populating the Data Infrastructure are working as scheduled, effectively and without material impact on operational systems. Acting promptly in the event of pipeline failure to minimise the impact on business services leveraging the Data Infrastructure.
4. Contribute technical advice and guidance relating to data governance and the data requirements of users and systems. Work as an individual or as part of a team in the planning, architecture and development of data solutions to get the best outcome for the University.
5. Ensure system processes and procedures are documented and kept up to date in-line with current University processes and industry best practice.
6. Ensure that Data Infrastructure system development continues in a timely manner by undertaking customisations according to the scope and the schedule, advising the Team Leader of any potential deviations from the schedule.
7. Reflect and embed the University's Principles, Objectives and Strategic Priorities when exercising the responsibilities of this position. For a more complete understanding and further information please access the Strategic Plan at: <https://federation.edu.au/about-us/our-university/strategic-plan>.

8. Undertake the responsibilities of the position adhering to:
- The Staff and Child Safe Codes of Conduct and Conflict of Interest Policy and Procedure;
  - Equal Opportunity and anti-discrimination legislation and requirements;
  - the requirements for the inclusion of people with disabilities in work and study;
  - Occupational Health and Safety (OH&S) legislation and requirements; and
  - Public Records Office of Victoria (PROV) legislation.

## Level of supervision and responsibility

The Developer, Data Engineer works under the broad direction of the Team Leader, Infrastructure. The Developer, Data Engineer is the subject matter expert in the University's Data Infrastructure and works closely with various University sections including the ITS Service Operations team, Data and Reporting team and Marketing teams. The position carries technical responsibility for advice, design, development, testing and implementation of authorised changes and enhancements to the Data Infrastructure. The Developer, Data Engineer will have the ability to work independently or as part of a team where appropriate to deliver priorities within agreed timeframes.

The Developer, Data Engineer is required to analyse operational data systems, solve problems and implement new functionality relating to the effective delivery of data assets and will be required to analyse complex information and develop effective solutions to complex problems in a timely manner. The position may be required to use initiative and adapt processes, often in consultation with other staff members of Information Technology Services (ITS) and the wider University community to develop solutions.

The Developer, Data Engineer will apply initiative and creative thinking to improve and promote quality and performance. The position is required to exercise judgement in decision making regarding the practicality and justification of changes to the University's Data Infrastructure and in designing effective solutions that reflect University policies and comply with all relevant reporting requirements.

The Developer, Data Engineer will develop and maintain knowledge of software used in the configuration and operation of the Data Infrastructure. In particular the position will have a thorough understanding of the relevant development toolsets, best practice development methodologies and the software development lifecycle.

A commitment to formal and informal learning and staying abreast of latest technology is also required.

The Developer, Data Engineer will develop or have a working knowledge and awareness of the structure and functions of the Schools and Sections within the University, in particular the relevant users of the University's Data Infrastructure.

## Training and qualifications

A degree in Information Technology or Computer Science with at least four years subsequent relevant experience in designing and coding in Microsoft .Net development with a focus on Oracle PL/SQL, Microsoft's SQL Server SSIS, Talend, Web Services (SOAP, REST), machine learning and Python or, an equivalent combination of relevant experience and/or education/training.

## Position/Organisational relationships

The Developer, Data Engineer will report to the Team Leader, Infrastructure, Information Technology Services and will be required to work with other Service Operations teams when required to meet data consumer needs.

The Developer, Data Engineer will be required to liaise with external vendors to support the University's Data Infrastructure. Additionally, they will be required to interact with key internal and external data consumers for data modelling and business suitability of data assets.

## Key selection criteria

Applicants must demonstrate they are able to undertake the inherent responsibilities of the position as contained in the position description and are able to meet the following Key Selection Criteria:

1. A degree in Information Technology or Computer Science with at least four years subsequent relevant experience in designing and coding in Oracle PL/SQL, Microsoft SQL Server, SSIS, Talend, Web Services (SOAP, REST), machine learning and Python or an equivalent combination of relevant experience and/or education/training.
2. Demonstrated experience in model management, analysing data asset requirements and developing complex data pipelines to effectively satisfy data requirements.
3. Demonstrated ability to write and optimise complex SQL queries and create efficient data flow tasks for data movement and ingestion to enterprise data warehouse systems.
4. Demonstrated design skills and a high level of expertise in complex systems analysis, problem solving and design for development of solutions, consistent with business requirements.
5. Demonstrated ability to read, contribute to and produce accurate and relevant documentation and code commenting in accordance with established technical standards.
6. Demonstrated project and time management skills, including the ability to manage competing priorities and timelines.
7. Demonstrated understanding of Information Technology Infrastructure Library (ITIL) processes and procedures.
8. Demonstrated proficient communication, interpersonal and negotiation skills, including proven experience and ability to work effectively in a team and contribute to a positive and safe workplace culture.
9. Demonstrated alignment with the University's commitment to child safety.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.