

## Job title: Data Engineer / Database Administrator

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|-----------------------|---------------------------------------|
| <b>Department:</b>    | IT & Digital Services (IT&DS)         |
| <b>Grade/ Salary:</b> | Grade 8, £52,511 - £60,224 (pro-rata) |
| <b>Contract Type:</b> | Permanent                             |
| <b>Hours:</b>         | 35 per week (Full time)               |
| <b>Location:</b>      | Hybrid - New Cross Campus / Home      |

### Goldsmiths

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Goldsmiths, University of London is a world-leading centre of educational excellence where ground-breaking research meets innovative teaching and thinking. We're looking for inspiring and talented people to help build on our global reputation while also growing personally in a true learning organisation.

As a college we are working to tackle inequality in all its forms and are working to promote equality on grounds of race, disability, age, sex, gender identity, sexual orientation, religion and belief, marriage and civil partnership, pregnancy and maternity, and caring responsibilities. We are keen to attract candidates from diverse backgrounds who share our commitment to creating an inclusive culture in which all students and staff can thrive.

Information for candidates with disabilities can be found on our [Disability & Individual needs](#) page. We are happy to supply information in alternative formats for disabled applicants. Please contact [hr-recruitment@gold.ac.uk](mailto:hr-recruitment@gold.ac.uk) to make your request.



## Department of IT&DS

The IT & Digital Services (IT&DS) department provides the digital platforms, infrastructure, and services underpinning learning, teaching, research, and administration at Goldsmiths.

We are evolving towards a **cloud-first, product-led and data-driven environment**, focused on delivering secure, scalable, and high-quality data services that enhance decision-making, insight, and operational effectiveness.

### Job description

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Reporting to: **Head of Platform Engineering**

Reports: N/A

#### Summary:

This is a senior technical role responsible for the **design, management, governance, and optimisation of Goldsmiths' data platforms**, including core databases, data pipelines, and data architecture.

The role combines **hands-on database administration (DBA)** with **data engineering and architecture responsibilities**, ensuring that organisational data is reliable, secure, and fit for both operational and analytical use.

You will work closely with **Infrastructure Engineers**, ensuring alignment between hosting, performance, and resilience, while taking ownership of the **data layer**, including quality, structure, and integration.

#### Main duties:

##### Data Architecture & Engineering

- Design and maintain scalable **data architectures**, including data models, flows, and integrations across systems
- Build and support **data pipelines (ETL/ELT)** to enable operational and reporting use cases
- Produce high- and low-level designs aligned to enterprise architecture and future-state data strategy
- Ensure effective integration between business systems, data platforms, and third-party services

- Contribute to development of a **modern data platform** aligned to cloud-first principles

## **2. Database Administration (DBA) & Platform Ownership**

- Administer and optimise database platforms across:
  - SQL Server / Azure SQL / PostgreSQL (or equivalent)
  - Cloud and hybrid data services
- Monitor and tune database performance (queries, indexing, storage, concurrency)
- Manage:
  - Backup and recovery processes
  - High availability and disaster recovery configurations
  - Database patching and lifecycle management
- Maintain database security, access control, and compliance standards

## **3. Data Quality, Governance & Standards**

- Establish and maintain **data quality frameworks**, including monitoring, validation, and issue tracking
- Identify, investigate, and resolve data quality issues and root causes
- Define and enforce:
  - Data standards
  - Naming conventions
  - Metadata and documentation practices
- Support development of a **data governance model**, including ownership, stewardship, and accountability

## **4. Monitoring, Performance & Operations**

- Implement monitoring and alerting for:
  - Data pipelines
  - Database performance
  - Data quality issues
- Proactively manage capacity, performance, and risk across the data estate
- Provide third-line support and lead root cause analysis for data-related incidents
- Ensure reliability and availability of critical data services

## **5. Cloud, Automation & DevOps**

- Support adoption of **DataOps and DevOps practices** for data platforms
- Automate deployment, configuration, and management of databases and pipelines
- Use scripting (PowerShell, Python, SQL) to improve efficiency and reduce manual overhead
- Contribute to CI/CD pipelines for database and data platform changes

## **6. Security, Compliance & Risk**

- Ensure data platforms comply with relevant frameworks and regulations such as:
  - GDPR
  - ISO 27001
  - Institutional data policies
- Implement and maintain:
  - Role-based access controls
  - Data protection and encryption mechanisms
- Support audits and maintain required evidence and controls

## **7. Service Improvement & Delivery**

- Lead data platform improvements including performance tuning, optimisation, and modernisation
- Support delivery of data-related project workstreams (design, build, implementation)
- Improve data accessibility and usability for reporting and analytics
- Collaborate with Product Managers, Architects, and delivery teams

## **8. Collaboration & Stakeholder Engagement**

- Work closely with Infrastructure Engineers to align on:
  - Hosting and performance
  - Storage and scalability
  - Backup and resilience strategies
- Partner with application teams to support data integration and optimisation
- Engage with business stakeholders to understand reporting and data needs
- Act as a subject matter expert for data platforms and data quality

## 9. Documentation & Knowledge Management

- Produce and maintain clear documentation covering:
  - Data architecture
  - Data flows and lineage
  - Database configurations and standards
- Contribute to knowledge sharing and best practices across IT&DS

## 10. General Responsibilities

- Participate in out-of-hours maintenance and incident response where required
- Work within ITIL-aligned service, risk, and change frameworks
- Contribute to a culture of continuous improvement, collaboration, and inclusion

## Person Specification

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Detailed below are the types of qualifications, experience, skills, and knowledge which are required of the post holder. Selection will be made upon evidence of best fit with these criteria.

### [Experience

- Significant experience in **database administration and data engineering**
- Strong track record managing enterprise databases in cloud or hybrid environments
- Experience designing **data architectures and data pipelines**
- Proven experience improving **data quality and governance practices**
- Experience delivering technical projects and service improvements in complex organisations

### Knowledge

- Deep understanding of:
  - Relational databases and data modelling
  - Data integration and pipeline design
  - Data quality and governance principles
- Familiarity with:
  - Cloud data platforms (Azure preferred)
  - ITIL service management

- Security and compliance frameworks (ISO 27001, GDPR)

## **Skills**

- Strong SQL and data analysis capability
- Performance tuning and optimisation expertise
- Excellent problem-solving and root cause analysis skills
- Ability to translate complex data concepts into business language
- Strong documentation and communication skills
- Ability to work independently and collaboratively

## **Qualifications (Desirable)**

- Relevant certifications, such as:
  - Azure Data Engineer Associate
  - Database certifications (Microsoft, PostgreSQL, etc.)
  - ITIL Foundation
  - Data governance or architecture certifications

## **Key Characteristics of the Role**

- Specialist focus on **data platforms and database services**
- Strong blend of **engineering, operations, and governance**
- Hands-on technical role with architectural input
- Critical to enabling **data-driven decision making and insight**

## **Summary of Benefits**

- Strong focus on professional development
- Hybrid working arrangements
- Competitive pension scheme
- Access to campus and University of London facilities

The Essential criteria sections show the minimum essential requirements for the post, therefore if you cannot demonstrate in your application, you meet the essential criteria categorised below, you will not be invited to interview.

The Desirable criteria sections show additional attributes which would enable the applicant to perform the role more effectively with little or no training.

The Category column indicates the method of assessment:

**A = Application form**

**C = Certificate**

**I = Interview**

**R = Reference**

**T = Test**

**P = Presentation**

|                                                                                                                                                                                        | Category |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>Essential Criteria 1 - Qualifications</b>                                                                                                                                           |          |
| Educated to degree level in Computer Science, Information Systems, Data Engineering, Software Engineering or a related discipline, or equivalent professional experience.              | A, C, I  |
| Relevant professional certification or demonstrable expertise in database administration, cloud data platforms or data engineering technologies.                                       | A, C, I  |
| <b>Desirable Criteria 1 - Qualifications</b>                                                                                                                                           |          |
| Microsoft Azure Data Engineer Associate, Azure Database Administrator Associate, or equivalent cloud data certification.                                                               | A, C,    |
| Professional certification in database administration, enterprise architecture, data governance, ITIL or related disciplines.                                                          | A, C,    |
| <b>Essential Criteria 2 - Experience</b>                                                                                                                                               |          |
| Proven experience administering and optimising enterprise database platforms, including SQL Server, Azure SQL, PostgreSQL or equivalent technologies in cloud and hybrid environments. | A, I, R  |
| Proven experience designing, building and supporting data architectures, data models and ETL/ELT data pipelines.                                                                       | A, I, R  |
| Experience implementing data quality controls, monitoring, validation processes and resolving complex data quality issues through root cause analysis.                                 | A, I, R  |
| Experience managing database backup, recovery, high availability and disaster recovery solutions for business-critical services.                                                       | A, I, R  |
| Experience delivering technical projects and service improvements within a complex enterprise environment.                                                                             | A, I, R  |
| Experience automating database and data platform administration using scripting, DevOps or DataOps practices.                                                                          | A, I, R  |

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|-----------------------------------------------------------------------------------------------------------------------------------|---------|
| <b>Desirable Criteria 2 - Experience</b>                                                                                          |         |
| Experience developing and supporting cloud-native data platforms within Microsoft Azure environments.                             | A, I    |
| Experience implementing data governance frameworks, metadata management and data stewardship practices.                           | A, I    |
| Experience working within Higher Education or similarly complex public-sector organisations.                                      | A, I    |
| Experience contributing to CI/CD pipelines and Infrastructure as Code for database and data platform deployments.                 | A, I    |
| <b>Essential Criteria 3 – Knowledge</b>                                                                                           |         |
| Strong knowledge of relational database management systems, database design principles and data modelling techniques.             | A, I, R |
| Thorough understanding of data integration, ETL/ELT methodologies and enterprise data architecture principles.                    | A, I, R |
| Knowledge of database performance monitoring, tuning and optimisation techniques.                                                 | A, I, R |
| Knowledge of data quality management, data governance and master data management principles.                                      | A, I, R |
| Understanding of information security, data protection and compliance requirements, including GDPR and ISO 27001.                 | A, I    |
| Knowledge of IT service management, change control and operational support processes within a structured IT environment.          | A, I    |
| <b>Desirable Criteria 3 - Knowledge</b>                                                                                           |         |
| Knowledge of Microsoft Azure data services including Azure SQL, Azure Data Factory, Synapse Analytics or equivalent technologies. | A, I    |
| Understanding of DataOps, DevOps and modern software delivery practices for data platforms.                                       | A, I    |
| Knowledge of data warehousing, analytics and business intelligence concepts.                                                      | A, I    |
| Understanding of enterprise architecture frameworks and strategic data management practices.                                      | A, I    |
| <b>Essential Criteria 4 - Skills</b>                                                                                              |         |
| Advanced SQL and database administration skills, including troubleshooting, optimisation and performance tuning.                  | A, I, T |
| Strong analytical and problem-solving skills with the ability to identify root causes and implement effective solutions.          | A, I, T |
| Ability to design, document and communicate technical solutions to both technical and non-technical audiences.                    | A, I, P |

|                                                                                                                            |         |
|----------------------------------------------------------------------------------------------------------------------------|---------|
| Strong organisational skills with the ability to manage multiple priorities and deliver outcomes within agreed timescales. | A, I, P |
| Ability to work collaboratively across technical teams and with business stakeholders to deliver data-driven outcomes.     | A, I, R |
| Strong scripting and automation skills using SQL, PowerShell, Python or equivalent technologies.                           | A, I, T |
| <b>Desirable Criteria 4 - Skills</b>                                                                                       |         |
| Ability to develop and maintain data visualisation, reporting or analytical solutions to support decision making.          | A, I    |
| Experience using monitoring, alerting and observability tools for database and data platform management.                   | A, I    |
| Ability to mentor colleagues and promote best practice in data management, governance and database administration.         | A, I    |
| Experience producing high- and low-level technical designs, standards and architectural documentation.                     | A, I, P |

**Please also note that where qualifications are required, employment is conditional on the verification of them. Qualifications (must be original documents) will be checked on or before the first day of appointment.**

**July 26**

## Summary of Benefits

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If you choose to work with us, you'll become part of a learning organisation that is committed to professional and personal development, with comprehensive and innovative staff development and wellbeing programmes.

You'll also have access to frequent lunchtime and evening talks, seminars and performances, and annual performance and development reviews.

Our other benefits include:

- Competitive salary
- Working in Zone 2, with fantastic transport links and interest free travel to work loans
- Excellent annual leave entitlement plus additional closure days at Christmas and Easter
- 3 days of volunteering leave per annum, plus parental and study leave allowance.
- Maternity, paternity, shared parental leave and adoption leave and pay
- Membership of USS or LPFA pension scheme, dependent upon grade
- Contractual sick pay provision
- Access to an Employee Assistance Programme, offering 24/7/365 confidential and free advice, support, and information service on a range of personal, family, or work-related matters.
- Free eye tests
- Cycle to work scheme
- Wellbeing initiatives including the Chaplaincy and Staff Choir
- On-site [dining facilities](#)
- Access to University of London facilities such as [Senate House Library](#)
- Membership of Staff Diversity Networks: (Dis)Ability, Goldsmiths Race Equality Group, LGBTQ+, Menopause, Parents and Carers, Women at Goldsmiths. (Staff are also encouraged to join networks as Allies should they wish to do so rather than as members)

## Further information

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For more information about Goldsmiths, please visit: [www.gold.ac.uk/about](http://www.gold.ac.uk/about)

**Thank you for your interest in working with us, we wish you all the best with your application.**