

**JOB DESCRIPTION**

## Job Title: Integration & Database Specialist

**Service: IT Services**

**Grade: G**

**Campus: All campuses, with hybrid working option.**

**Responsible to: Senior Integration and Database Specialist**

**Responsible for whom: N/A**

**Liaison with:** **Staff, students and external organisations as required**

## About the university of east london:

The University of East London has been pioneering futures since 1898: from the 2nd Industrial Revolution through to where we are now, the 4th. We are a careers-led university, dedicated to supporting our students to develop the skills, emotional intelligence and creativity needed to thrive in a constantly evolving world.

Vision 2028 has been developed to transform our curriculum, pedagogy, research impact and partnerships to make a positive difference to student, graduate and community success. Our bold but achievable goal is to become the leading careers-focused, enterprising university in the UK, one which both prepares our students for the jobs of the future and provides the innovation to drive that future sustainably and inclusively.

## The department:

UEL IT Services is a centralized resource working collaboratively with the University community to transform UEL's digital landscape in line with the University’s Vision 2028 strategic plan. IT Services collaborate with staff, students, partners, and collaborators to identify technological improvements for our learning and working environments. Projects are innovative and carried out in a constantly evolving cloud environment. We implement, develop, and provide support for systems and services within the university’s IT Service Portfolio.

## Job purpose:

The Integration Specialist is a key and highly specialised role within IT Services, critical to maintaining business continuity. The role involves the design, development, monitoring, and maintenance of data flows across UEL's extensive ecosystem of over 70 systems and services.

The postholder will lead and actively contribute to technical initiatives, ensuring the delivery of a high-performing, resilient service that aligns with industry standards and best practice frameworks. They will be expected to promote a culture of continuous improvement within the team and the wider department, driving the implementation of key ITIL initiatives.

A proactive approach to ensuring the security of database and integration technologies is critical, including the design and execution of vulnerability assessments and penetration testing to safeguard systems.

Building strong working relationships with key stakeholders across the University will be crucial, ensuring that systems remain aligned with evolving business requirements and continue to meet the University's operational needs effectively.

## Main duties and responsibilities:

**Design build operate and support**

* To assist in the architecture for all service integrations throughout the organisation, to ensure that services are integrated in the most secure, reliable, standardised and optimised manner
* To assist in the design for integration and database projects, ensuring that new services are provisioned according to departmental standards
* To create, maintain and support any integration used by the organization
* To ensure all database platforms, related procedures and service interfaces are accurately documented and knowledge is suitably shared across the team
* To ensure that all database and integration technologies are appropriately licensed (This includes both hardware and software), to regularly review license costs and seek opportunities for improvement
* To manage service capacity, to monitor services on a regular basis ensuring that capacity is managed proactively
* To contribute to continual service improvement measures at both a team and department level
* To architect and maintain diagrams and documentation for all databases and service integrations, to provide senior management monthly reports in relation to these technologies
* To act as consultant at board, working group and project level. To attend national conferences and specialist working groups as required (IE JISC, UCISA)
* Flexible working to support key university activities will be required
* Travel between UEL University sites within the UK will be required as will wider UK travel to attend supplier and trade events
* To undertake such other reasonable duties, commensurate with the grade of the post, as may be required by the senior management team of IT Services

## Horizon scanning:

* Evaluate and recommend approaches and technologies that will improve the UEL IT Integrations and databases.
* Flexible working to support on‐call activities may be required.
* To work in accordance with UEL equality and diversity policies and provision

## Collaboration:

* Build and sustain relationships with internal and external collaborators to share information, collaborate across Schools and Services, and influence decisions related to the University's services.
* **Supplier Management:** Build and or maintain supplier relationships, drive commercial value, and ensure the quality of services being delivered by key suppliers is fit for purpose
* **Ownership**: ITIL Process Owner or Process Manager roles within the IT Services department

## Technical Design Authority (TDA):

* Key adviser to TDA representing all matters relating to Integrations and Databases
* Validate internal and externally produced design proposals
* Ensure all solutions meet the University’s Business Continuity (BC) and Disaster Recovery (DR) needs

## Person specification

**EDUCATION, QUALIFICATIONS AND ACHIEVEMENTS:**

**Essential criteria;**

* A Degree level qualification in a relevant subject or relevant experience. (A/I)
* Demonstrable and extensive experience within large, complex organisations with multiple data stores. (A/I)

**Desirable criteria;**

* ITIL Foundation V4 (A/C)
* MuleSoft Certified Developer (A/C)

## Knowledge and experience:

**Essential criteria;**

* Knowledge of Mule ESB (Mule 4), Anypoint Platform, Anypoint Studio (A/I)
* Experience of using Dataweave 2 (A/I)
* Experience of architecting and developing solutions
* API design using RAML or OAS (A/I)
* API documentation (A/I)
* Scripting languages (JavaScript/Groovy) (A/I)
* Familiarity with JSON/XML/OData. (A/I)
* Understanding business requirements and converting these into Integrations (A/I)

**Desirable criteria.**

* MuleSoft Certified Developer (A/I/C)
* Experience of Source Control. (A/I)
* Knowledge of designing, installing, and configuring relational database systems with database administration experience using Oracle and SQL Server. (A/I)
* Familiarity with Java and or experience of any other industry standard programming languages. (A/I)
* Web development experience (HTML/JavaScript/CSS/Single page frameworks). (A/I)
* Experience using Microsoft Graph. (A/I)
* Knowledge of industry standards, regulatory frameworks, data protection and privacy legislation. (A/I)

## Skills and abilities:

**Essential criteria;**

* Experience calling and creating RESTful and SOAP web services/APIs to access and integrate with external and internal systems. (A/I)
* Experience of PL/SQL, SQL Management Studio and T-SQL. (A/I)
* Understanding business requirements and converting these into Integrations (A/I)

**Desirable criteria;**

* Extensive experience of creating, maintaining and supporting Systems Interfaces. (A/I)
* Demonstrated expertise in creating user documentation to define and document systems, integration layers, procedures, and processes in a clear coherent style according to a standardized framework. (A/I)
* Experience of managing large Database environments using mixed database technology stacks. (A/I)
* Microsoft Azure API Management and AWS API Gateway. (A/I)

## Communication

* Ability to effectively communicate with collaborators at all levels, including presenting to senior team members, leading workshops, and chairing project and governance meetings.
* Must be able to demonstrate the ability to communicate complex technical information to non-technical staff **(I)**

## Analysis and research

* Demonstratable commitment to staying up to date with technology and methodologies both in specific manufacturer products and across the wider Information Technology space. (A/I)
* Experience of investigating issues and providing solutions to problem tickets generated in relation to IT infrastructure services and platforms ensuring the solutions are tested, documented, and disseminated to all affected parties. (A/I)

## Initiative & problem solving:

**Essential Criteria**

* Using all available data, as well as researching various media sources, identify solutions to problem tickets generated in relation to Integrations and databases, ensuring the solutions are designed, developed, tested, documented, and disseminated to all affected parties. (A/I)
* Evaluate documented resolutions and analyse trends for ways to prevent future problems from occurring. (A/I)
* Needs to have a demonstrated ability to fix faults, solve problems, and apply innovative technology to overcome business challenges. (A/I)

## Planning and organising resources

* To participate in the formulation of short, medium, and long-term plans for integrations. (A/I)
* To determine the needs of the users in relation to integrations in all areas of the University and to determine how best to deploy products in the specialist area to meet user needs (A/I)
* Must be able to demonstrate experience of planning, prioritising, and organising own workload on a daily, weekly, or monthly basis, co‐ordinating with others, ensuring customer needs and expectations are met, administrative tasks are completed punctually, and all documentation updated effectively (A/I)

## Liaison and teamwork:

**Essential Criteria.**

* Foster and manage relationships with key partners both internally and externally, ensuring effective communication and collaboration to craft decisions related to the University's services.

## Other essential criteria:

* Commitment to and understanding of equal opportunities issues within a diverse and multicultural environment (I)

## Criteria tested by Key:

A = Application form

C = Certification

I = Interview

T = Test