

RECRUITMENT PACK



This document includes the following information:

- Job Description
- Person Specification
- Additional information

Making an application:

When completing the on-line application form you will be asked to answer questions to help you demonstrate how you meet the requirements of the post. Your answers will be used at the shortlisting and interview stages of the recruitment process. We therefore recommend that you take a copy of this recruitment pack to help with your preparation.

NOTE: You don't have to answer the questions in one attempt, but can save your incomplete application and return to it at another time. You may want to draft your answers using Microsoft Word and then copy your text into the application form. Please be aware that formatting (e.g. underline, bold, bulleting) will be lost in this process. If you are using an Apple product you will need to use an alternative web browser to Safari such as Google Chrome.

- Links to Guidance Notes and Frequently Asked Questions can be found on the Search Results page. These pages will open in a new window.
- **We recommend that you take a copy of this recruitment pack to help with your preparation.**

A commitment to sustaining an inclusive and diverse community is one of the University's Core Values and we are keen to address any imbalances in our workforce.

The University of Essex is proud to be part of the Disability Confident scheme and is committed to supporting diversity and equality, representative of our inclusive community. As part of our commitment to this scheme any candidate who has a disability and meets all the essential criteria for the role will be offered an interview. We also work in partnership with national disability organisation AccessAble who provide detailed online access guides to many of our campus buildings and facilities which you may find useful.

Please note: We are only accepting on-line applications for this post. However, if you have a disability that makes it difficult for you to provide us with information in this way, please contact the Resourcing Team (01206 876559) for help.

Closing Date: 16 June 2019

Interviews are planned for: 3 July 2019



JOB DESCRIPTION – Job ref REQ02656

Job Title and Grade:	Business Intelligence System Developer Grade 8
Contract:	Permanent, Full-time and Fixed-term, Full-time. The fixed-term post is until 31 July 2020 due to work on a specific project (University's Learner Analytics Project) finishing up. Part-time working may be considered for the fixed-term role.
Hours:	A notional minimum of 36 hours per week
Salary:	£33,199 - £39,609 per annum (pro rata, as applicable)
Department/Section:	Innovation and Technology Solutions
Responsible to:	Director of Innovation and Technology
Reports on a day to day basis to:	Business Intelligence System Architect
Purpose of job:	To work as part of a cross-functional team to support: <ul style="list-style-type: none"> ▪ Integration of new data into the University's data warehouse including data loading and data cleaning. ▪ Strategic data analysis, data reporting and benchmarking ▪ Improvement to data reporting systems, including better linkage between data from different sources, data returns and planning processes. ▪ Data warehouse administration (based on Microsoft SQL server) and Tableau server support.

These two posts present an exciting opportunity to make a significant contribution to the delivery of the University's strategic plan by providing timely and accurate data insight. Both roles will work as integral members of the Business Intelligence team within Innovation and Technology Solutions to enhance and support our BI service, which is bringing information together into a central data warehouse and providing tools to visualise and analyse this data in order to support more joined up decision making. For this, the role demands excellent analytical skills and a strong understanding of the use of complex data within higher education and of the challenges of cleaning, storing, and securing such information.

Post holders will also play a key role in relation to either the University's strategic planning process (permanent) or the Learner Analytics project (fixed-term) and will be responsible for services underpinning the provision of a wide range of engagement, planning, performance and benchmarking information. You will play a significant part in data extraction and integration, and analysis to facilitate the production of strategic management information to support the delivery of the strategic objectives within the Education Strategy and Research Strategy. We are looking for dynamic, numerate individuals, experienced in SQL (preferably Microsoft Transact-SQL) with good analytical and communication skills to join a high performing team to ensure that key decisions are fully informed by reliable and relevant information.

You will be a collaborative team player, able to work in and to facilitate cross-institutional teams, bringing people and ideas together across the Professional Services and Departments to establish and foster a network of Business Intelligence peers. Within the University the role holders will work closely with colleagues across Professional Services and Faculties like Finance, Academic Section, Admission, Communications and External Relations, and the Research and Enterprise Office. For the Learner Analytics project there will also be an element of liaison with external software suppliers' technical staff.

Working with the members of the Business Intelligence team and others you will help ensure the relevance and quality of management information and the reliability of our statutory data returns or, for

the Learner Analytics project role, the student data that is surfaced via student dashboards and of a range of related reports. You will use your communication skills as a technical contact and in liaising with faculties, departments and others as required. In addition, you will contribute to the further development of the University's delivery of management information through taking ownership of the Tableau server and providing a point of contact and support for Tableau authors around the University.

Duties of the Post:

The main duties of the post will include:

Working as part of a team, with particular responsibility for:

1. Contributing to the work of cross-University teams or the University's Learner Analytics project, informing the development and monitoring of strategies to enhance student support, access, retention and success. Working with:

- a. Widening Participation and Outreach colleagues or the Learner Analytics team to monitor and develop data sources that support and automate our reporting on Access Agreement targets relating to students from non-traditional backgrounds or on student engagement.
- b. Academic departments, the Student Support and Student Data teams and others, providing structured, high-quality sources of information to monitor and develop engagement, retention and student development strategies.
- c. Communication and External Relations, providing data to support the student recruitment and student registrations.

2. SQL Data Extraction, Server Administration and Reporting

- a. Developing ad-hoc SQL scripts to extract data from many of the University's transactional and analytical systems.
- b. Contributing to the annual provision and ongoing enhancement of performance and benchmarking data to support the University's annual planning process.
- c. Leading on the maintenance and expansion of a suite of reports tracking pre-entry data through to on-programme and outcome data i.e. enabling student "tracking" and targeting of policy initiatives. For the Learner Analytics (fixed-term) role this will include reports on student engagement, academic activities and outcomes to support decision making on related policy issues.
- d. Working closely with other Sections within the Professional Services to support the development and implementation of a University-wide management information reporting infrastructure.
- e. Working with the Planning and Business Intelligence Office to advise Professional Services, the Learner Analytics team and other relevant stakeholders of data requirements and on robust processes to maintain data integrity and quality.
- f. Together with the Business Intelligence System Architect, providing server administration (on a VMware platform) for the data warehouse and Tableau server, including establishment of the required processes and guidance documents.

3. Data Analysis

- a. Supporting the preparation, analysis, and dissemination of management information (in particular relating to the student life cycle) by working closely with our statistical data analyst and the Learner Analytics team.
- b. Ensuring information accuracy and accessibility for a range of internal audiences and purposes.
- c. Gathering and analysing external data as required and presenting findings, e.g. 'league table' analysis, external benchmarking and market intelligence.
- d. Working closely with analysts to provide and take responsibility for high-quality data sets that allow us to produce annual reports against our Access Agreement targets, including analysis of intake, retention and employability or for the Learner Analytics project, monitoring and other reports to committees and other groups as required.
- e. Producing data queries to retrieve specific set of data for ad-hoc work and requests.
- f. Proactively identify opportunities to provide enhanced data insights which may involve the integration or usage of new data sets.

4. University and Faculty Planning – Permanent Role



- a. Contributing to analysis of departmental and faculty performance to inform faculty planning and course review.
- b. Contributing to the enhancement of planning systems and services and advising on other University projects as appropriate.
- c. Working with the Planning and Business Intelligence Office to provide ad-hoc planning and management information to support the University's strategic objectives.

5. Education Data Insight – Learner Analytics (fixed-term) Role

- a. Working with the Education Data Insight Officer to provide data for reports and analysis as required.
- b. Supporting the automated preparation, checking and analysis of student data for regular updates to University committees and other groups.

Statutory Returns – Permanent Role

- a. Working as part of a team with the Business Intelligence System Architect, and Planning and Data Insight Officers and colleagues from the Admissions, Systems Administration and Management Information Systems offices to ensure continuity and robustness of returns processes.
- b. Supporting the automated preparation, checking and analysis of student data for statutory returns.

6. General

- a. Liaison and consultation with other parts of the Professional Services and with departments and faculties as appropriate.
 - b. Provide holiday and sickness cover for the Business Intelligence System Architect, Business Analyst (Student Number) Analyst and/or Business Intelligence Developer if required.
7. Any other duties as may be assigned from time to time by the Director of Innovation and Technology or their nominee.

These duties are a guide to the work that the post holder will initially be required to undertake. They may be changed from time to time to meet changing circumstances.

Terms of Appointment

For a full description of the terms of appointment for this post please visit:

<https://www.essex.ac.uk/staff/employment-policies-procedures/my-contract>

May 2019



PERSON SPECIFICATION

JOB TITLE: Business Intelligence System Developer
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Qualifications /Training

	Essential	Desirable
▪ An honours degree or equivalent level qualification or experience in a similar organisation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Evidence of continuing professional development in related areas, for example Tableau Server administration, database administration.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Experience/Knowledge

	Essential	Desirable
▪ Experience of line management (and mentoring) of a junior developer.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of database organisation, management and interrogation including the use of relational databases and the creation of SQL queries drawing together data from different sources.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Knowledge and experience of data modelling and designing relational data structures for long term data management.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of working with Microsoft SQL Server and associated tools (SSMS, SSIS, SSDT).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of maintaining and administering Microsoft SQL Server.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of maintaining and administering a widely deployed business system in a production environment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of administering Tableau Server.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Able to troubleshoot technical issues, perform root cause analysis and take appropriate action to remediate issues.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Proven programming experience in a modern development environment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of programming in Microsoft ASP.NET Core MVC, .NET Core, and C#.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Additional programming expertise in the at least three of the following areas: XML, JSON, PowerShell, HTML5, CSS, Microsoft Office Add-ins, WCF, Web Services, WPF, javascript, JQuery, Python, Regular expressions, Git.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Able to maintain source control repositories for a small team.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of using an issue tracking system (such as JIRA) in a production environment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of working with VMWare vSphere.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience and proficiency in the use of Office software, e.g. Microsoft Excel, Word, Outlook or similar.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of business process analysis and user requirements elicitation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Ability to document design, functional, and technical specifications.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ An understanding of performance monitoring, benchmarking and strategic planning in a complex organisation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ An understanding or interest in University administration, specifically widening participation and of the wider issues currently facing Higher Education.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Knowledge of a proprietary or in-house student records system.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

▪ Knowledge of specialist data reporting and analysis packages, e.g. Microsoft SQL Server Reporting Services, PowerPivot, R, Matlab.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Skills/Abilities

	Essential	Desirable
▪ Excellent problem solving and data analysis skills.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Good communication skills (both written and oral) and the ability to clearly present and explain complex data.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ A high level of numeracy and a good understanding of data reporting.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Good organisational skills and attention to detail and accuracy.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Good team working skills and the ability to work co-operatively as part of a team and to support co-working across institutional boundaries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ The ability to meet deadlines, to prioritise and manage a number of tasks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ The ability to interact effectively with people at different levels within the organisation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ A proven history of learning new skills in order to respond to evolving job requirements.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Familiarity with SharePoint or similar collaborative workspace environments.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other

	Essential	Desirable
▪ Ability to meet the requirements of UK 'right to work' legislation*.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*The University has a responsibility under the Asylum, Immigration and Nationality Act 2006 to ensure that all employees are eligible to work in the UK. Prior to commencing employment, the successful candidate will be asked to provide documentary evidence to this effect. Please note that the University will not be able to issue a Tier 2 Certificate of Sponsorship for this post. For further information about UK immigration requirements please follow this link <https://www.gov.uk/government/organisations/uk-visas-and-immigration>

May 2019

ADDITIONAL INFORMATION

Innovation and Technology Solutions

You can find more information about the department at the following link:

www.essex.ac.uk/it.

General information

Informal enquiries may be made to Richard Martin, Interim Assistant Director of Innovation and Technology (Corporate Information Systems) (telephone: 01206 872075 e-mail: rmarti@essex.ac.uk). However, all applications must be made online.

People Supporting Strategy

Please find a link to the People Supporting Strategy below:

<https://www.essex.ac.uk/-/media/documents/directories/human-resources/people-supporting-strategy.pdf>

Pay and benefits

We advertise our salaries on a range to indicate the trajectory of progression that can be made. Appointments are usually made at the start of the salary range. The university salary structure includes automatic pay progression within the published grades, subject to service and performance. In addition to this, there are performance related annual pay review schemes in place.

As an employer we offer a range of benefits and a commitment to career development and equal opportunities in an environment that both reflects and creates a rich interaction of people, disciplines and ideas.

- Pension scheme
- Generous holiday entitlement
- Competitive salaries
- Training and development
- Family friendly policies
- On campus childcare facilities, for more information visit www.wivenhoeParkDayNursery.co.uk
- Relocation support package for qualifying staff
- Interest free season ticket loan
- Range of optional salary exchange tax benefits (pension and bicycle schemes)

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