

Job Profile: Lecturer in Data Science

Position Title: Lecturer in Data Science

Institution: Belgium Campus ITversity

Location: Pretoria, Stellenbosch, Kempton Park - South Africa

Employment Type: Full-Time

Application Deadline: 2025-07-31

About Us:

Belgium Campus ITversity is a private higher education institution committed to excellence in teaching and research in field of Information Technology and Computing. Our Data Science department is a dynamic and rapidly growing department, integral to our diploma and degree programmes. We are seeking passionate and experienced individuals to join our team as Lecturers in the Data Science department. Given the rapid advancements and evolving landscape of data science, it is imperative to recruit lecturers who possess specialised knowledge and skills to ensure the highest standards of education.

Overview of the Data Science Department:

The aim of the Data Science department at Belgium Campus iTversity is to develop relevant knowledge, skills, and practices for data collection, storage, access, representation, modelling, analysis, visualization, interpretation, problem-solving, knowledge generation, and decision support. An important aspect of data science is the ability to use data to generate valuable insights and support decision making in organisations of various scales. The modules in our Data Science portfolio encompass the following areas:

- Database Development and Management
- Data Warehousing and ETL Processes
- Business Intelligence, Data Analytics and Reporting
- Artificial Intelligence and Machine Learning
- Distributed Databases and Cloud Data Platforms
- NoSQL Databases, Big Data and Emerging Database Technologies

Key Responsibilities:

Our academic staff are expected to provide not only theoretical knowledge but also offer practical insights and hands-on experience, preparing our students for successful careers in the field of data science.

- Ensure the quality of teaching and learning relevant modules within the Data Science department.

- Prepare and deliver engaging lectures, facilitate classroom discussions, manage classroom dynamics, provide relevant assessment feedback, and contribute to the overall student learning experience.
- Develop and manage learning, teaching, and assessment content including lecture slides, assignments, exercises, marking guides, and rubrics.
- Train students in various technologies in the data science domain, ensuring alignment with module outcomes.
- Set, grade and moderate various assessments including assignments, tests, and examinations according to Belgium Campus assessment policies.
- Provide academic support including identifying students at risk, referring them to the counsellors in the student support department, and taking remedial actions.
- Participate in staff development initiatives such as workshops and guest lectures.
- Engage in faculty activities as assigned by faculty management.
- Provide expert knowledge and guidance to students undertaking data science projects and dissertations.
- Maintain current knowledge of industry trends and advancements in data science.
- Collaborate with colleagues on curriculum development and improvement.
- Engage in research activities to contribute to the academic community.

Key Competencies and Skill Sets:

Not all the skills and competencies below are required, but candidates with a larger set of skills will be preferred.

- Excellent knowledge of relevant subject areas within the Data Science department.
- Excellent student engagement and classroom management skills.
- Excellent understanding of database models, design, development, and administration theories, principles and concepts, including entity relationship modelling and normalization.
- Proficiency in Structured Query Language (SQL), standard query languages and data access interfaces
- Ability to create a fully functional relational database using one of the popular Relational Database Management Systems (RDBMSs)
- Working knowledge of data warehousing concepts, architectures, and ETL (Extract, Transform, Load) processes.
- Proficiency in business intelligence tools, data visualization, reporting, and data analytics techniques.
- Ability to use statistical techniques and provide expert knowledge for analysing and interpreting data.

- Working knowledge of data platforms and sources for data science projects
- Working knowledge of data mining, AI and machine learning algorithms and models.
- Sound knowledge of cloud-based data platforms and distributed database systems.
- Sound knowledge of Big Data, NoSQL databases and emerging database technologies
- Ability to manage courses, develop assessments and use Moodle LMS effectively.
- Ability to use collaboration and content management software such as Microsoft Teams and SharePoint.

Technical Skills

The above position requires a diverse mix of technical skills, and selection of candidates will be based on the current skillsets as well as the potential to learn new skills. Successful candidates will be assigned to modules that align with their greatest competences. The following are some of the technologies used in the Data Science department:

- Relational Databases: SQL, MS Access, Microsoft SQL Server, Oracle Database, MySQL and PostgreSQL.
- Big Data and NoSQL Databases: Hadoop, MongoDB, DynamoDB, and Azure Cosmos DB.
- Cloud Data Platforms: Azure SQL Databases, AWS Amazon RDS, RedShift and Aurora
- Data Warehousing: Talend Open Studio for Data Integration, SQL Server Integration Services (SSIS)
- Business Intelligence and Data Analytics: Microsoft Power BI, Advanced Excel, Tableau, QlikView, , SQL Server Reporting Services (SSRS), Power BI Report Builder
- AI and Machine Learning Models: R, RStudio, Python, Anaconda Navigator, VS Code, Dash, Streamlit, GitHub

Preferred Qualifications:

- A relevant post-graduate qualification in Data Science, Computer Science, Information Technology, or a related field. Master's or PhD degree holders are preferred. Candidates studying towards Master's degrees will also be considered.
- Relevant teaching experience at a tertiary level.
- Industry experience in data science, database management, business intelligence, data analytics, AI, machine learning, or cloud data platforms.
- A track record of research and publications in relevant areas.

How to Apply:

Interested candidates should submit the following documents to vacancies@belgiumcampus.ac.za

- A cover letter outlining your suitability for the position.

- A detailed curriculum vitae (CV).
- Copies of academic qualifications.
- Contact information for three professional references.

Contact Information:

For further inquiries, please contact vacancies@belgiumcampus.ac.za.

Belgium Campus ITversity is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees.