



# DATA SYSTEMS MANAGER

(Payclass 11; Permanent)

**Centre for Educational Assessments (CEA)**

**Centre for Higher Education Development (CHED)**

The Centre for Educational Assessments' (CEA) mission as a department within the Centre for Higher Education Development (CHED) is to provide educational testing that contribute to access and success at the University of Cape Town and in the broader higher education and training sector. In realizing this mission, CEA develops educational tests that are reliable and valid in these higher educational contexts. Its educational measurement and learning analytics research support and informs teaching and learning and educational policy relating to admissions (selection and placement) and throughput within these contexts.

The main purpose of the Data Systems Manager position is to manage and develop the CEA databases, develop bespoke software systems for processing test data for the delivery of testing services to HE institutions, optimize and modernize existing systems and manage the maintenance of the computing hardware and software.

## Requirements:

- A Bachelors' degree (or equivalent NQF 7 level qualification) in Information Systems or related field (Computer Science, Engineering) with at least 3 years' recent and relevant experience including but not limited to process management experience, data integrity, data quality and system security experience, at the level sought for the post
- OR NQF 4 level qualification with a full suite of product certifications including but not limited to MS Database administration or MS Database fundamentals, A+ and N+ certification, 10 years' recent and relevant experience in Data Base Management & Development, including but not limited to process management experience, data integrity, data quality and system security experience, at the level sought for the post.
- Proficiency in database management systems and writing scripts.
- MS SQL and/or MySQL Server development experience.
- Proficiency in following programming language, .NET, C#, VB.net, Python or PHP.
- Proficiency in the Microsoft's Business Intelligence Suite and ETL with SSIS.
- Demonstrated experience with MVC, REST and LINQ.
- The ability to manage multiple concurrent projects and to work with multiple stakeholders.
- High level of attention to detail and the ability to work in a methodological manner.
- Ability to manage and organise workload within specified timelines.
- Good communication and interpersonal skills.
- Proven ability to analyse, follow and produce quality data for reporting and decision-making purposes.

## The following will be advantageous:

- Familiarity with SAP Business Objects.
- High-level database and Desktop and Mobile programming skills.
- Android, iOS and windows mobile development or Xamarin.
- Familiarity with SDLC and Agile methodologies.
- Knowledge and experience in Higher Education and educational assessment.
- Experience in statistical packages and data visualization software (PowerBI).

## Responsibilities:

- Service the data management and information and communications technology requirements of the Logistics and Research Teams
- Liaising and collaborating with UCT ICTS in servicing and maintaining the ICT infrastructure and data requirements for Logistics and the Research teams in CEA.
- Create, manage, and optimize database and adapt data systems in line with requirements.
- Consolidate and maintain the Easy pay database with the NBT Production database.
- Develop and maintain the CEA Research Database (Cohort data).
- Extract and clean data for the data warehouse using SSIS.
- Develop software solutions to optimize and improve accuracy and integrity of CEA test systems.
- Develop and generate reports from SAP Business Objects (NSC and Student admissions).
- Data extraction – ETL processing.
- Import, clean and match data from CEA Server.
- Compilation of scores into different formats for uploading data for PeopleSoft and NBT Website.
- Export data to institutions / organization.
- Populate and maintain a secure institutional website.
- Extract and prepare data for reports and statistical analysis.
- Manage the maintenance of computer hardware / software to ensure data integrity

The annual cost of employment, including benefits, is between R 671 593 - R790 107

**To apply**, please e-mail the below documents in a **single pdf file** to Ian Petersen at recruitment02@uct.ac.za:

- UCT Application Form (download at <http://forms.uct.ac.za/hr201.doc>)
- Cover letter, and
- Curriculum Vitae (CV)

Please ensure the title and reference number are indicated in the subject line.

An application which does not comply with the above requirements will be regarded as incomplete. Only shortlisted candidates will be contacted and may be required to undergo a competency test.

**Telephone:** 021 650 2163

**Website:** <http://www.cea.uct.ac.za>

**Reference number:** E220432

**Closing date:** 10 February 2023

*UCT is a designated employer and is committed to the pursuit of excellence, diversity and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups. Our Employment Equity Policy is available at <http://www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf>*

UCT reserves the right not to appoint.