



SA-TIED

Southern Africa – Towards Inclusive Economic Development

Terms of Reference

Data Analytics Student Programme

Background

The United Nations University World Institute for Development Economics Research (UNU-WIDER), together with the National Treasury of South Africa (NT) is seeking postgraduate students to apply for a Data Analytics Student Programme, with the aim of utilising relatively unexplored datasets housed at the National Treasury for ongoing research related to their degree. This programme will fall under the second phase of the Southern Africa – Towards Inclusive Economic Development (SA-TIED) and is affiliated to the Chief Data Analytics Officer of the National Treasury.

Offer and expectations

We invite applications from South-African-based postgraduate students to engage in a year-long Data Analytics Student Programme. The student will be expected to collaborate with relevant UNU-WIDER and NT staff to use NT data for their academic research outputs. This will include meeting with the NT to understand the various datasets available and cleaning, exploring, and analysing datasets in areas including but not limited to:

1. Expenditure data
2. Procurement data
3. Infrastructure data
4. Tax data

For more information on the use of administrative data:

- Please see [this paper](#) for an introduction to the tax data firm-level panel.
- Please see [this paper](#) for a further guide on the tax data firm-level panel.
- Please see [this paper](#) for a guide to government procurement data.
- Please see [here](#) for more information about the use of administrative tax data for research.

UNU-WIDER will cover reasonable and necessary expenses incurred during the work on the research project at the National Treasury in Pretoria. Additionally, modest honorariums will be provided for outputs such as cleaned data sets, metadata and technical notes.

What is expected of the student?

1. Be based in South Africa. It is not required for the applicant to be a South African citizen.
2. Be enrolled in a postgraduate degree in Data Science, Economics, Statistics or a related field.
3. Be able to travel to Pretoria periodically to work in the National Treasury at the NTSDF.
4. Have sound knowledge in working with data, including data cleaning and generation of baseline statistics, and have experience working with microdata and using relevant statistical software packages (e.g. R, Python, STATA, SQL).
5. Use the relevant data towards the completion of their research project.
6. Create the relevant documentation around the dataset they will be using, where applicable.
7. Sign agreements and abide by all restrictions imposed by NT and other government agencies with respect to disclosure of confidential firm- and individual-specific information.
8. If applicable, to present work in progress and final outputs as required by the programme.
9. Final dissertation to be published as a technical note or working paper on SA-TIED website.

Dates

29 March 2024: launch of request for applications for the SA-TIED student programme

26 April 2024: deadline on questions on the application process

10 May 2024: application submission deadline

31 May 2024: target date for informing on decisions

Evaluation process and criteria

Each application will be reviewed on the basis of relevant experience and personal motivation. Only the final decision on whether an application is accepted or not will be communicated to applying researchers.

Applicants may be requested to participate in an interview or technical assessment.

Application submission procedure

Applications should include:

- A CV (maximum 2 pages)
- Academic transcripts
- Proof of registration
- Short piece of code written in any statistical programme (maximum 1 page)
- Personal motivation statement of no more than 300 words. The motivation statement should clearly state the motivation for applying to undertake the

programme under the SA-TIED programme, and include a narrative of previous relevant experience and future career objectives.

- A supporting letter from the Academic Supervisor.

Submission of applications is done electronically by using the online form on the announcement page. Please familiarize yourself with the form in advance.

Any questions on the proposal process should be sent to aino@wider.unu.edu. All queries and responses will be published on the announcement page. Selected answers will be updated on a rolling basis.