

# Senior Lecturer/Associate Professor: Civil Engineering

Bloemfontein Campus

FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY | Department of Civil Engineering | Ref 1513



## Main purpose of the job

To develop academic material and lecture in allocated subjects for own and other programmes and, to execute appropriate community projects.

#### Main tasks

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|-----------|-----------------------------------|----|------------------------------|
| 1.        | Teaching, learning and assessment | 2. | Research                     |
| 3.        | Student evaluation                | 4. | Control and organisation     |
| 5.        | Administration and leadership     | 6. | Community service/engagement |

### Subject fields(s)

Transportation Engineering

|            | \$ |  |  |  |
|------------|----|--|--|--|
| About the  |    |  |  |  |
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| Nature of appointment   | Permanent Academic                          |
|-------------------------|---|
| Minimum salary scale    | R 979 931 per annum (Senior Lecturer)       |
| (Total Cost to Company) | R 1 124 437 per annum (Associate Professor) |

<u>Note</u>: CUT applies an internal parity model to determine remuneration that complies with the principle of "equal pay for work of equal value." Accordingly, the preferred candidate may expect an offer that is in line with their qualifications and years of similar experience. Please contact the Recruitment office for more information on the applicable salary scale.

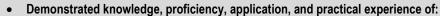


## Minimum Qualification/ Knowledge and/or Experience

## To be appointed as **Senior Lecturer**:

- A relevant Doctorate level degree (D Tech/D Eng./PhD/NQF 10 or equivalent) in Civil Engineering.
- Registration as a Candidate Engineering Technologist/Engineer supported by proof that an application for Pr Tech Eng./Pr Eng. registration with ECSA was submitted and is currently under review.
  OR
- A relevant Master's degree (M Tech/M Eng./NQF 9 or equivalent) in Civil Engineering.
- Registration as a Pr Tech Eng./Pr Eng. with ECSA.
- Evidence of progress towards a Doctorate degree.
- At least four years' teaching/lecturing experience in the relevant subject field.
- Evidence of research output, post-graduate supervision and presentations at national and international conference in accordance with the CUT's promotion requirements, including:
  - 1.5 credit outputs (Books, chapters in books, articles in accredited journals, papers published in peer-reviewed conference proceedings, patents, etc.).
  - Two completed Master's degrees as co-supervisor; or one completed Master's degree as supervisor (Not applicable if the applicant already has a minimum of 2.0 publication, research or innovation credit outputs at Lecturer level).
  - Four cumulative presentations/papers at conferences, of which one should be an international presentation/paper (International conferences held in South Africa are also regarded as international conferences).
  - Involvement in at least one community project (related to the teaching and learning and the research and innovation curriculum).

Minimum Qualification/ Knowledge and/or Experience



- Transportation engineering, transportation planning, traffic engineering, and pavement design at broadly defined and complex levels.
- Transportation planning and traffic modelling applications at broadly defined and complex levels.
- Environmental assessments related to transportation engineering.
- o Design, construction, and management of pavements in road related projects.
- Software applications related to transportation engineering, e.g., Rubicon Toolbox, AutoDesk (Civil-3D and AutoCAD), Civil Designer, PVT Visum, and/or TransCAD.
- Design codes: SANS1200 A-N (Civil Eng. Works), SAPEM CH10 (Pavement Design) TG2-2020 (Bitumen Stabilised Materials), COTO Standard and Specifications 2020 (Road and Bridge Works), TRH26 (South African Road Classification and Access Management Manual), TMH16 (Traffic Impact and Site Traffic Assessments), TRH4 (Structural Design of Flexible Pavements for Interurban and Rural Roads), TRH14 (Classification System for Granular Materials, Gravels, and Soils in South Africa), TRH17 (Geometric Design of Rural Roads), and the UTG (Urban Transport Guidelines) Series.

## To be appointed as **Associate Professor**:

- A relevant Doctorate level degree (D Tech/D Eng./PhD/NQF 10 or equivalent) in Civil Engineering.
- Registration as a Pr Tech Eng./Pr Eng. with ECSA.
- At least six years' teaching/lecturing experience in the relevant subject field.
- Evidence of research output, post-graduate supervision, and presentations at national and international conferences in accordance with the CUT's promotion requirements, including:
  - 3.0 credit units at Senior Lecturer level or 4.5 cumulative credit units (Books, chapters in books, articles in accredited journals, papers published in peer-reviewed conference proceedings, patents, etc.).
  - Three completed Master's degrees as main supervisor; OR two completed Doctorates as main supervisor at Senior Lecturer level OR four completed Master's degrees OR Three cumulative completed Doctorates as main supervisor OR at least one completed Master's degree as main supervisor and at least 9.0 cumulative credit units.
  - Ten cumulative presentations/papers at conferences, with at least three cumulative presentations/posters at an international conference.
  - Lead/manage at least one research project.

### • Demonstrated knowledge, proficiency, application, and practical experience of:

- Transportation engineering, transportation planning, traffic engineering, and pavement design at broadly defined and complex levels.
- Transportation planning and traffic modelling applications at broadly defined and complex levels.
- Environmental assessments related to transportation engineering.
- Design, construction, and management of pavements in road related projects.
- Software applications related to transportation engineering, e.g., Rubicon Toolbox, AutoDesk (Civil-3D and AutoCAD), Civil Designer, PVT Visum, and/or TransCAD.
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Desired Qualification, Knowledge and/or Experience

#### To be appointed as Associate Professor:

- Peer-reviewed publication track record in the field of specialisation (h-index or i10-index).
- Visible engagement in a relevant research community.
- Evidence of the acquisition of research grants from local and international sources.
- In possession of a teaching qualification in higher education.
- In possession of a National Research Foundation (NRF) rating.
- Evidence of the ability to lecture at both undergraduate and postgraduate levels.
- Evidence of interaction/engagement with professional community and the society.
- Evidence of work experience in a multicultural environment.
- Evidence of relevant industry experience.





looking for?