



Central University of
Technology, Free State

JOIN THE TEAM

Ubuntu

Integrity

Diversity

Innovation

Excellence

Lecturer: Civil Engineering

FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY (FEBIT) |

Department of Civil Engineering | Ref 2787



Bloemfontein Campus



About the
position

Main purpose of the job

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

Main tasks

- | | |
|---------------------------------------|-----------------------------|
| 1. Teaching, learning, and assessment | 2. Research |
| 3. Community engagement | 4. Student Evaluation |
| 5. Administration and leadership | 6. Control and Organisation |

Subject field(s)

Water Engineering (Hydraulics and Hydrology)



About the
appointment

Nature of appointment

Permanent Academic

Minimum salary scale (Total Cost to Company)

R 777 297 per annum

Note: 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.



What are we
looking for?

Minimum Qualification

- A relevant Bachelor's degree (BEng, BScEng, BEngTech Hons, or equivalent) at NQF Level 8 in Civil Engineering.
- Registration as a PrEng or PrTechEng (Civil Engineering) with ECSA.
- Evidence of progress towards a Master's degree in Civil Engineering.
- At least three years' teaching/industry experience in the relevant subject field(s).

OR

- A relevant Master's degree (MEng, MScEng, MTech, or equivalent) at NQF Level 9 in Civil Engineering.
- Registration as a Candidate Engineer/Engineering Technologist supported by proof that an application for PrEng/PrTechEng (Civil Engineering) registration with ECSA was submitted and is currently under final review.
- At least two years' teaching/industry experience in the relevant subject field(s).

Knowledge and/or Experience

- **Demonstrated knowledge, proficiency, application, and practical experience in Hydraulics, including:**
 - Application of mass flow, energy, and momentum principles in hydrostatics, hydrodynamics, pipe flow, open-channel flow, sediment transport, hydraulic design, hydraulic modelling, and water and wastewater treatment technologies at well-defined, broadly-defined, and complex levels.
 - Total life cycle costing and analyses of water supply systems, e.g., abstraction and diversion works, pump station selection and design, bulk water supply, and water reticulation networks.
 - Analyses, design, construction, and management of sewer and stormwater systems.
 - Design of hydraulic structures, e.g., culverts, bridges, weirs, and associated protection works.
 - Software applications related to water engineering (hydraulics), e.g., AutoDesk (AutoCAD & Civil-3D), Civil Designer, HEC-RAS, EPANET, EPASWMM, and Aqua Hydraulics.



What are we looking for?

Knowledge and/or Experience

- Design codes/legislation: (i) National Water Act (36/1998), (ii) Water Services Act (108/1997), (iii) National Environmental Management Act (107/1998), (iv) SANS1200 A-N (Civil Eng. Works), (v) CSIR (Red Book: Neighbourhood Planning and Design Guide for Sustainable Human Settlements), and (vi) SANRAL (Drainage Manual).

AND/OR

- Demonstrated knowledge, proficiency, application, and practical experience in Hydrology, including:**
 - Surface hydrology, engineering (design) hydrology, geohydrology, water resources management and planning, hydrological statistics, hydrological and hydraulic modelling, and environmental engineering at well-defined, broadly-defined, and complex levels.
 - Hydrological data processing, e.g., evaluation, processing, and quality control of historical information and observed hydrological and/or meteorological data.
 - Calibration of flow-gauging weirs and related hydraulic structures, inclusive of calibration techniques, velocity distributions, conventional current gaugings, velocity-index applications, and the development of rating and velocity distribution curves.
 - Hydrological surveying, e.g., topographical, flood, stake-out, and as-built surveys.
 - Design flood estimation and flood risk analyses, e.g., capacity analyses of drainage system infrastructure and the estimation of flood-line levels as part of the Stormwater Master Planning function.
 - Software applications related to water engineering (hydrology), e.g., AutoDesk (AutoCAD & Civil-3D), ArcGIS, QGIS, DREU, RLMA&SI, HEC-HMS, HEC-RAS, SWAT, WRSIM, and WRYM.
 - Design codes/legislation: (i) Conservation of Agricultural Resources Act (43/1983), (ii) National Water Act (36/1998), (iii) Disaster Management Act (57/2002), (iv) National Environmental Management Act (107/1998), and (v) SANRAL (Drainage Manual).

Desired Qualification, Knowledge and/or Experience

- Master's degree at NQF Level 9 in Civil Engineering plus PrEng/PrTechEng (Civil Eng.) registration with ECSA if in possession of an NQF 8 qualification.
- Evidence of progress towards a Doctorate degree in Civil Engineering if in possession of a Master's degree.
- Evidence of work experience in the subject field(s) covering all phases of the project life cycle.
- Evidence of experience in research and associated outputs.
- Community engagement services in the profession, e.g., consultancies and professional activities.



Interested?

Job-Related Enquiries

Prof OJ (Jaco) Gericke

✉ jgericke@cut.ac.za

Remuneration, Benefits and Process Enquiries

Recruitment Office

✉ jobs@cut.ac.za

To find out more or to apply, visit www.cut.ac.za/careers or <https://cut-employee.simplify.hr/>

CLOSING DATE FOR APPLICATIONS – 08 August 2025

THINKING BEYOND