



UNIVERSITY OF SOUTH AFRICA

UNISA is the only publicly funded institution in South Africa dedicated to distance education. In keeping with its mandate as a comprehensive, open and distance learning tertiary institution offering a variety of academic and career-focused programmes, the University is inviting applications for positions in the **COLLEGE OF SCIENCE ENGINEERING AND TECHNOLOGY (CSET)**.

To be considered for a position, applicants must meet all the generic requirements plus the specific requirements as stated per position. If found suitable for appointment, Unisa may offer an applicant a position at a level other than the level that was applied for. Furthermore, Unisa reserves the right to offer the applicant a contract appointment.

ACTIVITY:



TEACHING STATEMENT:

All applicants to attach a teaching statement (max 2 000 words) to their application as specified in one of the following options:

Option A: External applicants and internal applicants (from non-academic positions) – Describe how you intend to approach teaching and learning by taking into account the information in the policies listed below:

- Unisa's Tuition Policy
- Unisa's Open Distance Learning Policy
- Unisa's Assessment Policy
- Curriculum Policy
- Open Distance Learning (ODL) Pedagogy

The above-mentioned Policies of UNISA can be accessed on the web using a search engine. In the event that you cannot trace the ODL Pedagogy policy finalise your teaching statement without it.

Option B: Internal applicants (from academic positions) –

Explain your:

- Involvement in, or approach to, Open Distance Learning
- Approach to fostering a learner-centered approach.
- Involvement in, or approach to, teaching at either undergraduate or postgraduate level.
- Involvement in developing study material as an individual or in a team approach.
- The extent to which you have, or would, use an electronic learning platform for teaching.
- Your pass success rates in the courses you teach/taught and your plan to increase or maintain these rates.
- A peer and student evaluation of your teaching
- Your involvement in and provision of learner support to students

ACTIVITY:



The teaching statement must be supported by a portfolio of evidence which may be requested from short-listed candidates at the interview.

Candidates are expected to submit a research reflection or portfolio.

ACTIVITY:



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[APPLICATION FORM FOR A PERMANENT ACADEMIC POST](#)

ACTIVITY:



FOR MORE INFORMATION ON ACADEMIC POSITIONS (LEVELS) OPEN THE LINK OF THE POSITION YOU WISH TO APPLY FOR:

[POSITION: PROFESSOR](#)

[POSITION: ASSOCIATE PROFESSOR](#)

[POSITION: SENIOR LECTURER](#)

[POSITION: LECTURER](#)



The following positions exist in the various departments:

**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
INSTITUTE FOR NANOTECHNOLOGY AND WATER
SUSTAINABILITY
SCIENCE CAMPUS (FLORIDA)
ASSOCIATE PROFESSOR X1
SENIOR LECTURER X2**

The Institute for Nanotechnology and Water Sustainability (iNanoWS) is a research Institute of the College of Science, Engineering and Technology (CSET) that addresses current and emerging issues relating to Water Quality and Water Scarcity. iNanoWS focuses on the development of Nanotechnology enhanced smart materials and their application in Water Treatment and Water Sustainability. iNanoWS has two Research Focus areas namely Nanoscience and Water Sustainability. The Institute is further divided into the following thematic areas; Membrane Science and Technology, Nanostructured Materials, Applied Electrochemistry, the Urban Water Cycle and Water Treatment Technologies, Water and Health and Analytical & Environmental Research.

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Associate Professor (X1): Urban Water Cycle and Water Treatment Technologies
(Ref.CSET/Re-Ad/AP-UWCWTT/21-2023)

Qualifications:

- Doctorate in Chemistry/Water Science/Environmental Science, Environmental Engineering or Equivalent

Requirements:

- Candidate must have a proven track record in the field of the Urban Water Cycle and treatment technologies with expertise in Natural Organic Matter dynamics in drinking water treatment, emerging micro pollutants research and design of innovative water treatment technologies.
- 4 years relevant teaching/work/relevant experience
- Proven research profile and consistent publication record in peer-reviewed conference proceedings or journals in line with the UNISA Research and Innovation Policy at this level
- A proven record of supervision of postgraduate students (master's and Doctoral) to completion or appropriate industry experience will be considered.
- Involvement in industry-based research, engaged scholarship and the ability to attract external funding.

Recommendation:

- Registration South African Professional Bodies such as SACNASP and ECSA.
- A proven track record of successful mentoring of Postdoctoral Fellows.

Senior Lecturer (X2): Urban Water Cycle and Water Treatment Technologies
(Ref.CSET/Re-Ad/SL-UWCWTT/22-2023)

Post specific requirements for Senior Lecturer:

- Doctorate in Chemistry, Water Science/Environmental Science or Environmental Engineering or equivalent
- Candidate must have a track record in the field of the Urban Water Cycle and treatment technologies with particular expertise in Natural Organic Matter dynamics in drinking water treatment, emerging micro pollutants research and design of innovative water treatment technologies.
- The successful applicant must clearly demonstrate research on incorporation of nanoparticles into support matrices for Removal of Pollutants from water and resource recovery.
- 3 years relevant teaching/work/relevant experience
- Proven research profile and consistent publication record in peer-reviewed conference

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proceedings or journals in line with the Unisa Research and Innovation Policy at this level.

Recommendation:

- A proven record of supervision of master's students.
- Registration with South African Professional Bodies such as SACNASP

**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF COMPUTING
SCIENCE CAMPUS (FLORIDA)
ASSOCIATE PROFESSOR X1 (P6): COMPUTER SCIENCE**

Associate Professor (X1): Computer Science

(Ref.CSET/Re-Ad/AP-CS/23-2023)

Post specific requirements for Associate Professor:

- A Doctorate degree in Computer Science or equivalent field
- Candidates should hold both an undergraduate degree and higher qualifications in Computer Science
- Proven research profile and consistent publication record in accredited journals, peer-reviewed conference proceedings, books, or book chapters in line with the Unisa Research and Innovation Policy.
- A proven record of supervision of postgraduate Master's students to completion. Or for candidates who have no experience in an academic environment; ability to supervise master's and Doctoral students.

Field of Expertise for this position

- We are looking for candidates with expertise in at least two of the following fields: OO Programming; Parallel Programming; Networks; Theoretical Computer Science; Compiler Construction; Scientific Computing/Bigdata Science; Logic-Based Reasoning/Hardware Programming; Artificial Intelligence; Natural Language Processing; Formal Program Verification; Graphical User Interface Programming; Advanced Internet Programming; Mobile Development; Computer Security.

Recommendations:

- NRF rating or proof of application for NRF rating will be an advantage.
- Have experience in the development of new post graduate modules.
- Candidates research must be aligned with the Departments research interests.

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**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF ENGINEERING
DEPARTMENT OF CIVIL ENGINEERING
FLORIDA-SCIENCE CAMPUS (FLORIDA)
FULL PROFESSOR X1: CIVIL ENGINEERING**

(ACADEMICS)	CANDIDATES WITH A RESEARCH OR ACADEMIC BACKGROUND
(NON-ACADEMICS)	CANDIDATES FROM INDUSTRY

Professor (X1): Civil Engineering

(Ref.CSET/Re-Ad/P-CiE/24-2023)

Post specific requirements for Professor:

- A Doctoral degree in Civil Engineering or equivalent plus experience/track record as a researcher for a position of Professor
- A BSc or BEng in Civil Engineering, or a BTech in Civil Engineering
- A proven record of supervision of master's AND Doctoral candidates to completion
- Eligibility to register with the Engineering Council of South Africa as a Professional Engineer or Professional Engineering Technologist within 2 years effective after the appointment date.
- 5 years teaching/work/relevant experience
- Proven research profile and consistent publication record in peer-reviewed conference proceedings, journal articles, or book chapters or books in line with the Unisa Research and Innovation Policy at this level.

Field of Expertise:

- The candidate must have expertise in any of the following research areas:
Transportation Engineering, Water Engineering, Geotechnical engineering, Structural engineering, Environmental engineering.

Recommendations:

- Professional Registration with ECSA or registration in process
- Membership of the South African Institute of Civil Engineers
- NRF rating or eligibility to apply for rating.
- Evidence of research grants obtained or applied for
- Experience with reflexive/ODL research
- Participation in departmental, school, college and University committees including workplace committees or task teams and voluntary associations.
- Participation in community engagement projects

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**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF ENGINEERING
DEPARTMENT OF MINING ENGINEERING
FLORIDA-SCIENCE CAMPUS (FLORIDA)
ASSOCIATE PROFESSOR X1: MINING ENGINEERING**

(ACADEMICS)	CANDIDATES WITH A RESEARCH OR ACADEMIC BACKGROUND
(NON-ACADEMICS)	CANDIDATES FROM INDUSTRY

Associate Professor (X1): Mining Engineering

(Ref.CSET/Re-Ad/AP-MiE/25-2023)

Post specific requirements.

- A Doctoral degree in Mining Engineering or equivalent plus experience/track record as a researcher for a position of Associate Professor
- A BSc or BEng in Mining Engineering, or a BTech in Mining Engineering
- A proven record of supervision of master's OR Doctoral candidates to completion
- Eligibility to register with the Engineering Council of South Africa as a Professional Engineer or Professional Engineering Technologist within 2 years effective after the appointment date.
- 4 years teaching/work/relevant experience
- Proven research profile and consistent publication record in peer-reviewed conference proceedings, journal articles, book chapters, or books in line with the Unisa Research and Innovation Policy at this level.

Field of Expertise for this position:

- The candidate must have expertise in at least one of the following research areas: Rock Engineering, Mine Design and Planning, Mine Mechanisation, Mineral Economics, Geostatistics and Geometallurgy.

Recommendations:

- A Bachelor's degree (NQF7/8) in a discipline closely related to Mining Engineering
- Professional Registration with ECSA or registration in process
- NRF rating or eligibility to apply for rating.
- Evidence of research grants obtained or applied for
- Experience with reflexive/ODL research
- Participation in departmental, school, college and University committees including workplace committees or task teams and voluntary associations.
- Participation in community engagement projects

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**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF SCIENCE
DEPARTMENT OF CHEMISTRY
FLORIDA-SCIENCE CAMPUS (FLORIDA)
FULL PROFESSOR/ ASSOCIATE PROFESSOR (P5) X1: CHEMISTRY / BIOCHEMISTRY EDUCATION
SENIOR LECTURER (P7) X1: CHEMISTRY /BIOCHEMISTRY EDUCATION**

(ACADEMICS) CANDIDATES WITH A RESEARCH OR ACADEMIC BACKGROUND
(NON-ACADEMICS) CANDIDATES FROM

Full professor/ Associate Professor: Science Education with specialization in Chemistry

(Ref.CSET/Re-Ad/P.AP-Edu/26-2023)

Post specific requirements: Professor.

- PhD degree in Science Education with specialization in Chemistry or cognate field.
- MSc in Chemistry or master's degree in science education with specialization in Chemistry
- BSc Honours in Chemistry or BSc Honours in Science Education with Chemistry **OR**
- BSc Honours in Biochemistry or BSc Honours in Science Education with Life Science
- An extensive experience (minimum of 5 years) in the teaching and curriculum development of Science Education at postgraduate levels at a tertiary institution.
- A proven research profile and consistent publication record in peer-reviewed conference proceedings or journals in line with the Unisa Research and Innovation Policy at this level.
- Record of successful supervision of postgraduate dissertations and/or thesis of MSc and/or PhD students to completion.
- Success in securing external research funding.
- Evidence of mentoring junior staff members and leadership in community engagement projects.

Field of Expertise:

- A proven track record in the field of Chemistry Education.

Recommendations:

- Experience with teaching in an ODL environment.
- Active academic citizenship roles.
- Proven record of international collaborations.
- Experience in multidisciplinary research activities
- Government collaborations.
- NRF rating or applied for re-rating.
- Experience in innovative teaching and learning

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Post specific requirements: Associate professor

- PhD degree in Science Education with specialization in Chemistry or cognate field.
- MSc in Chemistry or master's degree in science education with specialization in Chemistry
- BSc Honours in Chemistry or BSc Honours in Science Education with Chemistry **OR**
- BSc Honours in Biochemistry or BSc Honours in Science Education with Life Science
- An extensive experience (minimum of 4 years) in the teaching and curriculum development of Science Education at postgraduate levels at a tertiary institution.
- A proven research profile and consistent publication record in peer-reviewed conference proceedings or journals in line with the Unisa Research and Innovation Policy at this level.
- Record of successful supervision of postgraduate dissertations and/or thesis of MSc to completion and experience in PhD student supervision.
- Success in securing external research funding.
- Evidence of mentoring junior staff members and leadership in community engagement projects.

Field of Expertise:

- A proven track record in the field of Chemistry Education.

Recommendations:

- Experience with teaching in an ODL environment.
- Active academic citizenship roles.
- Proven record of international collaborations.
- Experience in multidisciplinary research activities
- Government collaborations.
- NRF rating or applied for re-rating.
- Experience in innovative teaching and learning

Senior Lecturer: Science Education with specialization in Chemistry

(Ref.CSET/Re-Ad/SL-Edu/27-2023)

Post Requirements: Senior Lecturer

- PhD degree in Science Education with specialization in Chemistry or cognate field.
- MSc in Chemistry or master's degree in science education with specialization in Chemistry
- BSc Honours in Chemistry or BSc Honours in Science Education with Chemistry **OR**
- BSc Honours in Biochemistry or BSc Honours in Science Education with Life Science
- An extensive experience (minimum of 3 years) in the teaching and curriculum development of Science Education postgraduate levels at a tertiary institution.
- A proven research profile and consistent publication record in peer-reviewed conference proceedings or journals in line with the Unisa Research and Innovation Policy at this level.

- Record of successful supervision of postgraduate dissertations and/or thesis of MSc and/or PhD students
- Success in securing external research funding.

Field of Expertise:

- A proven track record in the field of Chemistry Education.

Recommendations:

- Experience with teaching in an ODL environment.
- Active academic citizenship roles.
- Proven record of collaborations.
- Experience in multidisciplinary research activities.

**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF SCIENCE
DEPARTMENT OF CHEMISTRY
FLORIDA-SCIENCE CAMPUS (FLORIDA)
PROFESSOR/ ASSOCIATE PROFESSOR (P5/P6) X1: CHEMISTRY**

Professor/ Associate Professor (X1): Chemistry

(Ref.CSET/Re-Ad/AP-Che/28-2023)

Post specific requirements Professor:

- A Doctoral degree in Chemistry with specialization in Organic Chemistry or Polymer Chemistry/Science.
- Minimum of 5 years relevant experience in the teaching and curriculum development of Organic Chemistry at undergraduate and postgraduate levels at a tertiary institution.
- A proven research profile and consistent publication record in peer-reviewed conference proceedings, journals, book chapters or books in line with the Unisa Research and Innovation Policy at this level.
- Record of successful supervision of postgraduate dissertations and thesis of MSc and PhD students to completion.
- Evidence of mentoring junior staff members, leadership in community engagement projects and success in securing external research funding.

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Field of Expertise:

- A proven record of accomplishment in the field of Organic Chemistry with specialization in Polymer Chemistry/Science.

Recommendations:

- Experience with teaching and learning in an ODeL environment.
- Active academic citizenship roles.
- Proven record of international collaborations.
- Experience in multidisciplinary research activities.
- Industrial or government collaborations.
- NRF rated scientist.
- Registration with a professional body such as SACNASP.

Post specific requirements Associate Professor:

- A Doctoral degree in Chemistry with specialization in Organic Chemistry or Polymer Chemistry/Science.
- Minimum of 4 years relevant experience in the teaching and curriculum development of Organic Chemistry at undergraduate and postgraduate levels at a tertiary institution.
- A proven research profile and consistent publication record in peer-reviewed conference proceedings, journals, book chapters or books in line with the Unisa Research and Innovation Policy at this level.
- Record of successful supervision of postgraduate dissertations and/or thesis of MSc and/or PhD students to completion.
- Participation in community engagement activities.

Field of Expertise:

- A record of accomplishment in the field of Organic Chemistry with specialization in Polymer Chemistry/Science.

Recommendations:

- Experience with teaching and learning in an ODeL environment.
- Active academic citizenship roles.
- Proven record of national/international collaborations.
- Success in securing research funding (internal or external).
- NRF rating or applied for rating.
- Registration with a professional body such as SACNASP.

Salary	:	Remuneration is commensurate with the seniority of the position
Assumption of duty	:	As soon as possible
Enquiries	:	Mr TA Masego – 011 670 9237 Mr J Maano – 011 670 9081
Closing Date	:	22 September 2023

Your [APPLICATION FORM FOR A PERMANENT ACADEMIC POST](#) must be accompanied by a COMPREHENSIVE CURRICULUM VITAE and;

- identity document (*including passport, work permit, permanent residence permit or proof of nationalisation if applicable*) (certified copies within the previous six months).
- all educational qualifications (certified copies within the previous six months).
- academic transcripts/records (certified copies within the previous six months).
- proof of SAQA verification for foreign qualifications (*if applicable*) (certified copies within the previous six months)
- **for ACADEMIC POSITIONS** a teaching statement (refer to page 1 of advertisement).
- UNISA reserves the right to authenticate all qualifications without any further consent from the applicant.
- The contact details of three contactable references must be provided, one of which must be from your present employer excluding your current line manager if you are an internal Unisa applicant.
- **Late, incomplete, and incorrect applications will not be considered.**
- Unisa is not obliged to fill an advertised position.
- *Appointments will be made in accordance with Unisa's Employment Equity Plan and other applicable legislation.*



- **We welcome applications from Persons with Disabilities**

ACTIVITY:



- Applications must be emailed to CSET2PA@unisa.ac.za
- If you apply for more than one position, each application must be on a separate email.



Applications emailed to the incorrect email address will not be considered.

Late, incomplete, and incorrect applications will not be considered.

All applications should reach UNISA before 16h00 on the closing date.

Correspondence will be limited to short-listed candidates only. If you have not been contacted within two months after the closing date of this advertisement, please accept that your application was not successful.

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