



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**.

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:



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



The following positions exist in the various departments:

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES
FLORIDA-SCIENCE CAMPUS (FLORIDA)
FULL PROFESSOR (P5) X1: PURE MATHEMATICS
SENIOR LECTURER (P7) X1: PURE MATHEMATICS

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

Professor (X1): Pure Mathematics (Ref.CSET/NEW/P-PMath/1-2022)

Post specific requirements for Professor:

- A Doctorate degree or equivalent in Pure Mathematics
- 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 at this level.
- A proven record of supervision of research Masters and Doctoral students to completion.

Field of Expertise for this position:

- The candidate must have expertise in one or more of the following areas:
Algebraic Logic, Category Theory, Commutative Algebra, Functional Analysis, Measure Theory, Nonstandard Analysis, Operator Theory, Universal Algebra, Algebraic Topology.

Recommendations:

- Ability to lecture in an online environment
- An NRF rating or proof of application thereof would be an advantage
- Participation in community engagement projects
- Active academic citizenship roles
- Proven record of national/international collaborations.

Senior Lecturer (X1): Pure Mathematics (Ref.CSET/NEW/SL-PuMath/2-2022)

Post specific requirements for Senior Lecturer:

- A Doctoral degree or equivalent in Pure Mathematics plus experience/track record as a researcher for a position of Senior Lecturer
- 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 one or more of the following areas:
Group Theory or Ring Theory.

Recommendations:

- Ability to lecture in an online environment
- Participation in community engagement projects

**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/NEW/AP-MinEng/3-2022)*

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

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF COMPUTING
SCIENCE CAMPUS (FLORIDA)
ASSOCIATE PROFESSOR (P6)/PROFESSOR (P5) X2 COMPUTER SCIENCE

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

Associate Professor/Professor (X2): Computer Science *(Ref. CSET/NEW/AP.P-CompSc/4-2022)*

Post specific requirements for 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 Masters and Doctoral students to completion

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/Big Data 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:

- Experience to lecture in an online environment
- NRF rating or proof of application for NRF rating will be an advantage
- Evidence of satisfactory student pass rates in the past two years of employment at their institution

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 Masters students to completion

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/Big Data 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:

- Experience to lecture in an online environment
- NRF rating or proof of application for NRF rating will be an advantage
- Evidence of satisfactory student pass rates in the past two years of employment at their institution

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

Professor (X1): Chemistry (Ref.CSET/NEW/P-Chemi/5-2022)

Post specific requirements Professor:

- A Doctoral degree in Chemistry with specialization in Organic Chemistry.
- 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.

Field of Expertise:

- A proven record of accomplishment in the field of Organic Chemistry.

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.

Professor/ Associate Professor (X1): Chemistry (Ref.CSET/NEW/AP.P-Chemistry/6-2022)

Post specific requirements Associate Professor:

- A Doctoral degree in Chemistry with specialization in Organic Chemistry.
- 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.

HOW TO APPLY: See last page of advertisement

Page 5 of 9

- Participation in community engagement activities.

Field of Expertise:

- A record of accomplishment in the field of Organic Chemistry with specialization in Natural Products and/or Drug Delivery.

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.

Post specific requirements Professor:

- A Doctoral degree in Chemistry with specialization in Organic Chemistry.
- 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.

Field of Expertise:

- A proven record of accomplishment in the field of Organic Chemistry with specialization in Natural Products and/or Drug Delivery.

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.

Professor/ Associate Professor (X1): Chemistry/ Biochemistry Education (Ref.CSET/NEW/AP.P-Bioch/7-2022)

Post specific requirements:

- PhD degree in Chemistry/Biochemistry with specialization in Education.
- BSc Honours in Chemistry/Biochemistry
- 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 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/Biochemistry 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
- MSc in Chemistry/Biochemistry

Associate professor: Chemistry/Biochemistry Education**Post specific requirements:**

- PhD degree in Chemistry/Biochemistry with specialization in Education.
- BSc Honours in Chemistry/Biochemistry
- 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/Biochemistry Education.

Recommendations:

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

Senior Lecturer (X1): Chemistry/ Biochemistry Education (Ref.CSET/NEW/SL-Biochem/8-2022)**Post Requirements: Chemistry/Biochemistry**

- PhD degree in Chemistry/Biochemistry with specialization in Education.
- MSc/BSc Honours in Chemistry/Biochemistry
- 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/Biochemistry Education.

HOW TO APPLY: See last page of advertisement

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 PHYSICS
FLORIDA-SCIENCE CAMPUS (FLORIDA)
LECTURER (P8) X1 : PHYSICS**

Lecturer (X1): Physics *(Ref.CSET/NEW/L-Physics/9-2022)*

Post specific requirements for Lecturer:

- Msc in Physics.
- Research in the focus area of experimental physics in condensed matter and nanomaterials.
- Proven record of synthesis, fabrication, and characterization of nanomaterials, with evidence of publications in peer-reviewed reputable scientific journals.
- Teaching experience at tertiary level.

Recommendations:

- Teaching experience in an online environment.
- PhD in Physics
- Membership of professional body /bodies.
- Evidence of device fabrication (thin films).
- Knowledge of operating at least five of the following equipment: HR-SEM, RAMAN, FTIR, DLTS, PPMS, XPS, UV-VIS-NIR, XRD, Tunable lasers, Thermoluminescence system, Electron Deposition System, ESR.

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 : 30 September 2022

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 wrong 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 closing date of this advertisement, please accept that your application was not successful.