

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.**

To be considered for a position, applicants must meet all the generic requirements <u>plus</u> 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.



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



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



APPLICATION FORM FOR A PERMANENT ACADEMIC POST

B

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY SCHOOL OF ENGINEERING

DEPARTMENT OF CIVIL AND ENVIRONMENT ENGINEERING AND BUILDING SCIENCE SCIENCE CAMPUS (FLORIDA)

PROFESSOR X1

SENIOR LECTURER X2

LECTURER X1

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

<u>Professor (X1): Civil and Environment Engineering and Building Science</u> (*Ref.CSET/01-2025/Re-Ad6/P-CEEBS*) Post specific requirements for <u>Professor:</u>

- A Doctoral Degree in Civil Engineering or equivalent plus experience/track record as a researcher or a professional engineer that warrants the position of Professor, and
- A BSc or BEng in Civil Engineering, or a BTech in Civil Engineering or equivalent.
- 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 or journals in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of postgraduate master's and Doctoral students to completion.

Field of Expertise:

 The candidate must have expertise in at least one of the following research areas:
 Transportation Engineering or Water Engineering or Geotechnical engineering or Construction materials or Structural engineering or Environmental engineering

Recommendations:

- Professional Registration with ECSA
- NRF 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

<u>Senior Lecturer (X2): Civil and Environment Engineering and Building Science</u> (Ref.CSET/02-2025/Re-Ad2/SL-CEEBS)

Post specific requirements for Senior Lecturer:

- A Doctoral Degree in Civil Engineering or equivalent plus experience/track record as a researcher or a professional engineer that warrants the position of Senior lecturer, and
- A BSc or BEng in Civil Engineering, or a BTech in Civil Engineering or equivalent.
 - A proven record of supervision of master's or Doctoral candidates to completion
- Eligibility to Register with the Engineering Council of South Africa within 2 years of appointment.
- 3 years 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 masters students to completion.

Field of Expertise:

• The candidate must have expertise in Structural Engineering.

Recommendations:

- Professional Registration with ECSA
- NRF 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

Lecturer (X1): Civil and Environment Engineering and Building Science (Ref. CSET/03-2025/New-Ad/LCEEBS)

Post specific requirements for Lecturer:

- A master's degree in civil engineering or equivalent in addition to a BSc or BEng in Civil Engineering, or a BTech in Civil Engineering or equivalent.
- Registered as a candidate with ECSA and working towards professional registration. However, Professional registration with ECSA will be an added advantage.
- At least 2 years of teaching/work/relevant experience.
- Proof of registration for PhD.

Field of Expertise:

• The candidate must have expertise in Structural or Geotechnical Engineering or Construction management.

Recommendations:

- Experience with reflexive/ODL research
- Participation in departmental, school, college and University committees, workplace committees, task teams, and voluntary associations.
- Participation in community engagement projects

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

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

Associate Professor (X1): Mining Minerals and Geomatics Engineering (Ref. CSET/04-2025/Re-Ad6/AP-MMGE)

Post specific requirements Associate Professor.

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
- Professional Registration with ECSA as Pr Eng or Pr Tech Eng or registration in progress.
- 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
- 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 ENGINEERING DEPARTMENT OF INDUSTRIAL ENGINEERING AND ENGINEERING MANAGEMENT SCIENCE CAMPUS (FLORIDA) PROFESSOR/ ASSOCIATE PROFESSOR X1 SENIOR LECTURER X2 LECTURER X1

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

Associate Professor (X1): Industrial Engineering and Engineering Management (Ref.CSET/05-2025/Re-Ad6/AP-IEEM)

Post specific requirements for <u>Associate Professor:</u>

- A Doctoral degree in Industrial Engineering or equivalent plus experience/track record as a researcher for a position of Associate Professor.
- A BSc or BEng in Industrial Engineering, or a BTech in Industrial Engineering
- A proven record of supervision of Masters OR Doctoral candidates to completion
- Professional Registration with ECSA as Pr Eng or Pr Tech Eng or registration in progress.
- 4 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 at least one of the following research areas: Systems Engineering, Enterprise Architecture, Design for Manufacture, Material and Process Selection, Operation Research, Quantitative Techniques, Industrial Engineering Design, Industrial Accounting and Engineering Costing

Recommendations:

- 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

<u>Senior Lecturer (X2): Industrial Engineering and Engineering Management</u> (Ref. CSET/06-2025/Re-Ad3/SL-IEEM)

Post specific requirements for Senior Lecturer:

- A Doctoral degree in Industrial Engineering or equivalent plus experience/track record as a researcher or a professional engineer that warrants the position of Senior Lecturer, and
- A BSc or BEng in Industrial Engineering, or a BTech in Industrial Engineering or equivalent.
- Professional Registration with ECSA as Pr Eng or Pr Tech Eng or registration in progress.
- 3 years 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 master's or Doctoral students to completion.

Field of Expertise:

The candidate must have expertise in at least one of the following research areas:
 Systems Engineering, Enterprise Architecture, Design for Manufacture, Material and Process Selection,
 Operation Research, Quantitative Techniques, Industrial Engineering Design, Industrial Accounting and Engineering Costing

- NRF 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.

SCHOOL OF ENGINEERING

DEPARTMENT OF CHEMICAL MATERIALS ENGINEERING

SCIENCE CAMPUS (FLORIDA)

PROFESSOR/ ASSOCIATE PROFESSOR X1

SENIOR LECTURER X1

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

<u>Professor/ Associate Professor (X1): Chemical Materials Engineering (Ref.CSET/07-2025/New-Ad/P.AP-CME)</u>

Post specific requirements for Professor:

- A Doctoral degree in Chemical Engineering or equivalent plus experience/track record as a researcher for a position of Full Professor.
- A BSc (Eng) or BEng in Chemical Engineering, or a BTech in Chemical Engineering.
- Professional Registration with ECSA as Pr Eng or Pr Tech Eng or registration in progress.
- 5 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.
 (Research
- outputs Units 7 ROUs in five years or 5 ROUs in three years)
- A proven record of supervision of postgraduate Master's and Doctoral students to completion.

Field of Expertise:

The candidate must have expertise in at least one of the following research areas:

Water treatment, Process Design, Energy, Materials development, Waste valorisation

Recommendations:

- 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

Post specific requirements Associate Professor.

- A Doctoral degree in Chemical Engineering or equivalent plus experience/track record as a researcher for a position of Associate Professor.
- A BSc (Eng) or BEng in Chemical Engineering, or a BTech in Chemical Engineering.
- A proven record of supervision of Master's OR Doctoral candidates to completion.
- Professional Registration with ECSA as Pr Eng or Pr Tech Eng or registration in progress.
- 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.
 (Research outputs Units 6 ROUs in five years or 4 ROUs in three years)

Field of Expertise for this position:

The candidate must have expertise in at least one of the following research areas:

Water treatment, Process Design, Circular Economy, Green Economy, Waste Valorisation

Recommendations:

- 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

Senior Lecturer (X1): Chemical Engineering (Ref. CSET/08-2025/New-Ad/SL-CME)

Post specific requirements for <u>Senior Lecturer</u>:

- A BSc (Eng) or BEng in Chemical Engineering, or a BTech in Chemical Engineering.
- A Doctoral degree in Chemical Engineering or equivalent plus experience/track record as a researcher for a position of Senior Lecturer.
- Professional Registration with ECSA as Pr Eng or Pr Tech Eng or registration in progress.
- Minimum of 3 years relevant experience in the teaching and curriculum development of Chemical Engineering at undergraduate and postgraduate levels at a tertiary institution.
- 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:

• Interested in applications from all areas of Chemical Engineering but particularly interested in applications from candidates working in Engineering Education (ODeL), Catalysis, Process Design, Advanced and Applied Materials, Energy, Waste to Energy, Water and Wastewater Treatment.

- A proven record of supervision of master's students.
- NRF rating or eligibility to apply for rating.
- Evidence of research grants obtained or applied for.
- Experience with reflexive/ODeL research.
- Participation in departmental, school, college and University committees including workplace. committees or task teams and voluntary associations.
- Participation in community engagement projects.
- Teaching Chemical Engineering Design modules (e.g., Equipment, Process, etc.).

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY SCHOOL OF SCIENCE

DEPARTMENT OF MATHEMATICAL SCIENCES FLORIDA-SCIENCE CAMPUS (FLORIDA)

ASSOCIATE PROFESSOR (P5) X1: PURE MATHEMATICS

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

Associate Professor (X1): Pure Mathematics (Ref.CSET/09-2025/Re-Ad7/AP-Pure)

Post specific requirements for Associate Professor:

- A Doctorate degree or equivalent in Pure Mathematics or related field.
- 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 minimum of four years teaching experience in a Higher Education institution
- A proven record of supervision of research Masters or 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:

- Experience with teaching 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.

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

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.

Professor (X1): Analytical and Environment Research (Ref. CSET/10-2025/Re-Ad2/P-AER)

(Candidates who have previously applied do not need to submit a new application)

Post specific requirements for Professor:

Qualifications:

 Doctorate in Analytical Chemistry, Water Science/Environmental Science or Environmental Engineering or equivalent.

Requirements:

- Candidate must have a proven track record in the field of Analytical and Environmental research with specific expertise on applications to both chemical and microbial emerging pollutants in aquatic systems.
- Proven research track record in ability to handle Analytical Instruments, analytical work covering different type of matrices, with aspects of toxicology and risk assessment.
- 5 years 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 (Masters and Doctoral) students to completion.
- A proven track record of successful mentoring of Postdoctoral Fellows.
- Mentoring of junior staff and the ability to attract external funding in the relevant field of research and collaboration with other researchers, both nationally and internationally.

Recommendation:

- An NRF C rating (or above) will be an added advantage.
- Registration with South African Professional bodies such as SACNASP and ECSA.

Associate Professor (X1): Urban Water Cycle and Water Treatment Technologies

(Ref.CSET/11-2025/Re-Ad4/AP-UWCWTT)

Post specific requirements for <u>Associate Professor:</u>

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.

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

SCHOOL OF ENGINEERING

DEPARTMENT OF STATISTICS

SCIENCE CAMPUS (FLORIDA)

FULL PROFESSIOR/ ASSOCIATE PROFESSOR X1: STATISTICS

ASSOCIATE PROFESSOR X1: STATISTICS

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

Full Professor / Associate Professor (X1): Statistics (Ref.CSET/12-2025/New-Ad/P.AP-STA)

Post specific requirements for <u>Professor</u>:

- A Doctoral degree in Statistics or any related field of study.
- Candidates should have a background in Mathematical Statistics (or Mathematics and Statistics) from their undergraduate and Honours or equivalent degrees.
- Minimum of 5 years relevant experience in the teaching and curriculum development of Mathematical or Statistics modules at undergraduate and postgraduate levels at a tertiary institution.
- 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 postgraduate Masters and Doctoral students to completion.
- Experience of using statistical and mathematical software packages (e.g. SAS, R, SPSS, STATA, Mathematica and Matlab).

Field of Expertise for this position

 We are looking for candidates with expertise to teach Mathematical Statistics or Statistics modules at all levels.

Recommendations

- Specialization in at least one of the following fields will be an advantage: Bayesian Statistics, Spatial Statistics,
 Data Science.
- Experience to teach in an online environment.
- NRF rating or proof of application for NRF rating.

Post specific requirements for Associate Professor:

- A Doctoral degree in Statistics or any related field of study.
- Candidates should have background in Mathematical Statistics (or Mathematics and Statistics) from their undergraduate and Honours or equivalent degrees.
- Minimum of 4 years relevant experience in the teaching and curriculum development of Mathematical or Statistics modules at undergraduate and postgraduate levels at a tertiary institution.
- 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 postgraduate Masters or Doctoral students to completion.
- Experience of using statistical and mathematical software packages (e.g. SAS, R, SPSS, STATA, Mathematica and Matlab).

Field of Expertise for this position

• We are looking for candidates with expertise to teach Mathematical Statistics or Statistics modules at all levels.

Recommendations

- Specialization in at least one of the following fields will be an advantage: Bayesian Statistics, Spatial Statistics,
 Data Science
- Experience to teach in an online environment.
- NRF rating or proof of application for NRF rating.

Associate Professor ×1: Statistics (Ref.CSET/13-2025/New-Ad/AP-STA)

Post specific requirements for <u>Associate Professor</u>:

- A Doctoral degree in Statistics or any related field of study.
- Candidates should have background in Mathematical Statistics (or Mathematics and Statistics) from their undergraduate and Honours or equivalent degrees.
- Minimum of 4 years relevant experience in the teaching and curriculum development of Mathematical or Statistics modules at undergraduate and postgraduate levels at a tertiary institution.
- 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 postgraduate Masters or Doctoral students to completion.
- Experience of using statistical and mathematical software packages (e.g. SAS, R, SPSS, STATA, Mathematica and Matlab).

Field of Expertise for this position

 We are looking for candidates with expertise to teach Mathematical Statistics or Statistics modules at all levels.

Recommendations

- Specialization in at least one of the following fields will be an advantage: Bayesian Statistics, Spatial Statistics,
 Data Science.
- Experience to teach in an online environment.
- NRF rating or proof of application for NRF rating.

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF SCIENCE
DEPARTMENT OF CHEMISTRY
FLORIDA-SCIENCE CAMPUS (FLORIDA)
PROFESSOR (P5) X1: ORGANIC CHEMISTRY
PROFESSOR (P5) X1: PHYSICSL CHEMISTRY

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

Professor P4 (X1): Organic Chemistry: (Ref.CSET/14-2025/New-Ad/P-OrChem)

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 record of accomplishment in the field of Organic Chemistry, with specialization in organic synthesis.

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 P4 (X1): Physical Chemistry: (Ref. CSET/15-2025/New-Ad/P-PhChem)

Post specific requirements Professor:

- A Doctoral degree in Chemistry with specialization in Physical Chemistry.
- Minimum of 5 years relevant experience in the teaching and curriculum development of Physical 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 record of accomplishment in the field of Physical Chemistry, with specialization in Single Crystal XRD and/or electrochemistry.

- 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.

SCHOOL OF SCIENCE

DEPARTMENT OF CHEMISTRY

FLORIDA-SCIENCE CAMPUS (FLORIDA)

PROFESSOR/ ASSOCIATE PROFESSOR (P4/5) X1: CHEMISTRY /BIOCHEMISTRY EDUCATION

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

<u>Professor/ Associate Professor (X1): Chemistry/ Biochemistry Education</u> (Ref.CSET/16-2025/New-Ad/P.AP-ChEdu)

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

Post specific requirements: <u>Associate professor</u>

- 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.

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

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY SCHOOL OF COMPUTING SCIENCE CAMPUS (FLORIDA)

PROFESSOR/ ASSOCIATE PROFESSOR (P4/P5) X2: COMPUTER SCIENCE
SENIOR LECTURER (P6) X1: COMPUTER SCIENCE
PROFESSOR/ ASSOCIATE PROFESSOR X1 (P4/P5): INFORMATION SYSTEMS
SENIOR LECTURER (P6) X1: INFORMATION SYSTEMS

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

<u>Professor/Associate Professor (X2): Computer Science (Ref. CSET/17-2025/Re-Ad7/P.AP-CS)</u> Post specific requirements for <u>Professor:</u>

- A Doctorate degree or equivalent in Computer Science or related field
- Candidates should hold both an undergraduate degree and higher qualifications in Computer Science or related field.
- 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 postgraduate students: Master's and Doctoral students to completion or appropriate industry experience will be considered.
- Research in the field of Computer Science in one or more in these areas, Artificial Intelligence, Machine Learning, Data Science, Theoretical Computer Science, Image Processing, Software Engineering, Natural Language Processing, Security, Scientific Computing, Computer Architecture, Data Science, and Robotics
- Experience in Program Development, Program Review and Program Qualification Mix.
- Experience in leadership including leadership in different committees.
- Record of attracting the external funding
- Experience in participating and leading Engaged Scholarship (Community Engagement)

- NRF Rated
- Experience in teaching in an Open Distance Learning pedagogy.
- Preparedness to advance Open Distance Learning pedagogy.

- A Doctorate degree or equivalent in Computer Science or related field
- Candidates should hold both an undergraduate degree and higher qualifications in Computer Science or related field.
- 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 postgraduate students: Master's students to completion or appropriate industry experience will be considered.
- Research in the field of Computer Science in one or more in these areas, Artificial Intelligence, Machine Learning, Data Science, Theoretical Computer Science, Image Processing, Software Engineering, Natural Language Processing, Security, Scientific Computing, Computer Architecture, Data Science, and Robotics
- Experience in Program Development, Program Review and Program Qualification Mix.
- Experience in leadership including leadership in different committees.
- Record of attracting the external funding
- Experience in participating and leading Engaged Scholarship (Community Engagement)

Recommendations:

- NRF Rated
- Experience in teaching in an Open Distance Learning pedagogy.
- Preparedness to advance Open Distance Learning pedagogy.

Senior Lecturer (X1): Computer Science (Ref. CSET/18-2025/Re-Ad7/SL-CS)

Post specific requirements for **Senior Lecturer**:

- A Doctorate degree in Computer Science or related field
- A Research profile with publications in accredited journals, peer-reviewed conference proceedings, books, or book chapters in line with the Unisa Research and Innovation Policy or appropriate industry experience will be considered.
- Evidence of supervision of Honours and master's students or appropriate industry experience will be considered.
- Research in the field of Computer Science in one or more in these areas, Artificial Intelligence, Machine Learning, Data Science, Theoretical Computer Science, Image Processing, Software Engineering, Natural Language Processing, Security, Scientific Computing, Computer Architecture, Data Science, and Robotics
- Participating in Engaged Scholarship (Community Engagement)
- Experience in participating in different committees in department, school, or external bodies.

- Experience and preparedness to advance Open Distance Learning pedagogy.
- Record of successful application for external funding
- Experience in Program Development, Program Review and Program Qualification Mix.
- Experience in leadership including heading different committees.
- Experience in attracting external funding.

Professor P5/ Associate Professor P6 (X1): Information Systems (Ref.CSET/19-2025/New-Ad/P.AP-IS)

Post specific requirements for Professor:

- A Doctorate degree or equivalent in Information Systems
- Candidates should hold both an undergraduate degree and higher qualifications in Information Systems
- 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
- 5 years teaching/work/relevant experience
- A proven record of supervision of postgraduate Master's and Doctoral students to completion

Recommendations:

- Minimum NRF C rating
- Experience and preparedness to advance Open Distance Learning pedagogy.

Post specific requirements for Associate Professor:

- A Doctorate degree or equivalent in Information Systems
- Candidates should hold both an undergraduate degree and higher qualifications in Information Systems
- 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
- 4 years teaching/work/relevant experience
- A proven record of supervision of postgraduate master's or Doctoral students to completion.

Recommendations:

- Minimum NRF C rating
- Experience and preparedness to advance Open Distance Learning pedagogy.

Senior Lecturer P7 (X1): Information Systems (Ref.CSET/20-2025/New-Ad/P.AP-IS)

Post specific requirements for Senior Lecturer:

- A Doctorate degree or equivalent in Information Systems
- A Research profile with publications in accredited journals, peer-reviewed conference proceedings, books, or book chapters in line with the Unisa Research and Innovation Policy or appropriate industry experience will be considered.
- 3 years teaching/work/relevant experience
- Participating in Engaged Scholarship (Community Engagement)

Recommendations:

- Experience and preparedness to advance Open Distance Learning pedagogy.
- Experience serving in committees of practice.

Post specific requirements for Professor or Associate Professor, Senior Lecturer and lecturer:

All Information Systems sub-fields such as but not limited to Computer Security, Social Media Management, Mobile Programming, Health Informatics, Data Visualisation, Digital Business, Robotics, Green Computing, Advanced software Development, Information Technology Governance and Strategy, Computing Infrastructures, Business and Technology, Data Governance and Security, Contemporary Information Technology Development Management, Business and Technology Resilience, Digital Change Management, Information Technology Management (ITM) Business Case Research Report, Workplace Competencies, Research Skills for IT Professionals

SCHOOL OF COMPUTING

SCIENCE CAMPUS (FLORIDA)

5 YEAR CONTRACT WITH BENEFITS

PROFESSOR X4 (P4) CENTRE FOR AUGMENTED INTELLIGENCE AND DATA SCIENCE (CAIDS)

Through research, CAIDS integrates Artificial Intelligence and Data Science into key areas, such as medicine, education, and renewable energy, to directly contribute to shaping a future where these technologies serve the communities across Africa and globally. CAIDS, therefore, values the potential for AI technologies to break down language and cultural barriers by providing accessible and personalised services that cater to diverse needs, thus aligning with Unisa's vision of transcending such barriers and serving every country on the African continent.

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

<u>Professor/Associate Professor P4 (X1): Natural Language Processing</u> (Ref. CSET/21-2025/CAIDS/P.AP-NLP) Post specific requirements for Professor:

- A doctorate degree in computer science/information systems/information technology or related fields in science, engineering and technology.
- Candidate must have a proven track record in the field of Natural Language Processing, specifically applied to at least two of these areas: Speech and Voice Recognition Systems, Smart Assistants, Healthcare Systems, Language Translation, and Text Analytics.
- Candidate must have a 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.
- 5 years of teaching/work/relevant experience.
- A proven record of supervision of postgraduate Master's and Doctoral students to completion.
- Involvement in industry-based research, engaged scholarship and a proven record of attracting external funding.

Recommendations:

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows.

Requirements for Associate Professor:

- Candidate must have a proven track record in the field of Natural Language Processing, specifically
 applied to at least two of these areas: Speech and Voice Recognition Systems, Smart Assistants,
 Healthcare Systems, Language Translation, and Text Analytics.
- Candidate must have a 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.
- 4 years of teaching/work/relevant experience.
- A proven record of supervising postgraduate master's students to completion.
- Involvement in industry-based research, engaged scholarship and the ability to attract external funding.

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows.

Professor/Associate Professor P5 (X1): Computer Vision (Ref.CSET/22-2025/CAIDS/P.AP-CV)

Post specific requirements for Professor:

- A doctorate degree in computer science/information systems/information technology or related fields in science, engineering and technology.
- Candidate must have a proven track record in the field of Computer Vision, specifically applied to at least two of these areas: Surveillance Systems, Robotics, Autonomous Vehicles, Medical Imaging, Motion Capture, and Machine Inspection.
- Candidate must have a 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.
- 5 years of teaching/work/relevant experience.
- A proven record of supervision of postgraduate Master's and Doctoral students to completion.
- Involvement in industry-based research, engaged scholarship and a proven record of attracting external funding.

Recommendations:

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows.

Requirements for Associate Professor:

- Candidate must have a proven track record in the field of Computer Vision, specifically applied to at least two of these areas, Surveillance Systems, Autonomous Vehicles, Medical Imaging, Motion Capture, Machine Inspection.
- Candidate must have a 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.
- 4 years of teaching/work/relevant experience.
- A proven record of supervision of postgraduate master's students to completion.
- Involvement in industry-based research, engaged scholarship and the ability to attract external funding.

Recommendations:

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows will be an added advantage.

Professor/Associate Professor P5 (X1): Data Science (Ref. CSET/23-2025/CAIDS/P.AP-DS)

Post specific requirements for Professor:

- A doctorate degree in computer science/information systems/information technology or related fields in science, engineering and technology.
- Candidate must have a proven track record in the field of Data Science, specifically applied to at least two
 of these areas: Artificial Intelligence of Things (AloT), Artificial Intelligence Ethics, Education Technology
 (learner analytics), Healthcare Data Analytics, Data Science in Renewable Energy, and Sentiment Analysis
 in student support.
- Candidate must have a 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.
- 5 years of teaching/work/relevant experience.
- A proven record of supervision of postgraduate Master's and Doctoral students to completion.
- Involvement in industry-based research, engaged scholarship and a proven record of attracting external funding.

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows.

Requirements for Associate Professor:

- Candidate must have a proven track record in the field of Data Science, specifically applied to at least two
 of these areas, Artificial Intelligence of Things (AloT), Artificial Intelligence Ethics, Education Technology
 (learner analytics), Healthcare Data Analytics, Data Science in Renewable Energy, Sentiment Analysis in
 student support.
- Candidate must have a 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.
- 4 years of teaching/work/relevant experience.
- A proven record of supervision of postgraduate master's students to completion.
- Involvement in industry-based research, engaged scholarship and the ability to attract external funding.

Recommendations:

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows will be an added advantage.

<u>Professor/Associate Professor P5 (X1): Augmented Intelligence</u> (Ref. CSET/24-2025/CAIDS/P.AP-AI) Post specific requirements for Professor:

- A doctorate degree in computer science/information systems/information technology or related fields in science, engineering and technology.
- Candidate must have a proven track record in the field of Augmented Intelligence, specifically applied to at least two of these areas: Augmented Reasoning, Logical Reasoning, Generative AI, Education, and Healthcare Assistance.
- Candidate must have a 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.
- 5 years of teaching/work/relevant experience.
- A proven record of supervision of postgraduate Master's and Doctoral students to completion.
- Involvement in industry-based research, engaged scholarship and a proven record of attracting external funding.

Recommendations:

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows.

Requirements for Associate Professor:

- Candidate must have a proven track record in the field of Augmented Intelligence, specifically applied to at least two of these areas: Augmented Reasoning, Logical Reasoning, Generative AI, Education, and Healthcare Assistance.
- Candidate must have a 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.
- 4 years of teaching/work/relevant experience.
- A proven record of supervision of postgraduate master's students to completion or appropriate industry experience will be considered.
- Involvement in industry-based research, engaged scholarship and the ability to attract external funding.

- NRF rating.
- A proven track record of successful mentoring of Postdoctoral Fellows.

Salary: Remuneration is commensurate with the seniority of the position

Assumption of duty: As soon as possible.

Enquiries : 011 670 9081 Mr J Maano

Closing Date : 21 March 2025 (Email application before close of business at 16:00).

Your <u>APPLICATION FORM FOR A PERMANENT ACADEMIC POST</u> 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 <u>foreign qualifications</u> (*if applicable*) (<u>certified copies within the previous six months</u>)
- 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 <u>three contactable references</u> 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.