



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:



APPLICATION FORM FOR A PERMANENT ACADEMIC POST

ACTIVITY:



HOW TO APPLY: See last page of advertisement

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
SCHOOL OF ENGINEERING
DEPARTMENT OF INDUSTRIAL ENGINEERING
SCIENCE CAMPUS (FLORIDA)
PROFESSOR/ ASSOCIATE PROFESSOR X1
SENIOR LECTURER X1**

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

Professor/ Associate Professor (X1): Industrial Engineering (Ref.CSET/New/P.AP-IE/00-2023)

Post specific requirements Full Professor:

- A Doctoral degree in Industrial Engineering or equivalent plus experience/track record as a researcher for a position of Professor
- A BSc or BEng in industrial Engineering, or a BTech in Industrial Engineering
- A proven record of supervision of Masters 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 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 at least one of the following areas:
Systems Engineering, Enterprise Architecture, Design for Manufacture, Material and Process Selection, Operation Research, Quantitative Techniques, Industrial Engineering Design, Industrial Accounting, Engineering Costing and Lean Manufacturing

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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

Associate Professor**Post specific requirements for Associate Professor:**

- 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
- Eligibility to register with the Engineering Council of South Africa as a Professional Engineer or Professional Engineering Technologist within 2 years effective appointment date.
- 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 areas:
Systems Engineering, Enterprise Architecture, Design for Manufacture, Material and Process Selection, Operation Research, Quantitative Techniques, Industrial Engineering Design, Industrial Accounting, Engineering Costing and Lean Manufacturing.

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

Senior Lecturer (X1): Industrial Engineering (Ref.CSET/New/SL-IE/01-2023)**Post specific requirements for Senior Lecturer:**

- A Doctoral degree in Industrial Engineering or equivalent plus experience/track record as a researcher for a position of Senior Lecturer
- A BSc or BEng in Industrial Engineering, or a BTech in Industrial Engineering
- Eligibility to register with the Engineering Council of South Africa as a Professional Engineer or

HOW TO APPLY: See last page of advertisement

- Professional Engineering Technologist within 2 years effective appointment date.
- 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:

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

Recommendations:

- Professional Registration with ECSA
- NRF 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

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

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

Associate Professor (X1): Mechanical Engineering (Ref.CSET/New/AP-ME/03-2023)

Post specific requirements for Associate Professor:

- Doctorate in Mechanical Engineering or equivalent
- A BSc or BEng in Mechanical Engineering, or a BTech in Mechanical Engineering or equivalent.
- Eligibility to register with the Engineering Council of South Africa within 2 years of effective appointment date.
- Candidates must have a proven track record in one of the following fields Advanced Manufacturing specialising in Advanced Welding (Friction Stir Welding or Laser Metal Deposition), Maintenance Engineering and Fluids Mechanics.
- 4 years teaching/work/relevant experience

- Proven research profile and consistent publication record in accredited journal articles, peer-reviewed conference proceedings, or book chapters or books in line with the Unisa Research and Innovation Policy at this level.
- A proven record of supervision of Masters OR Doctoral candidates to completion
- Proven record of mentoring of junior staff

Recommendations:

- Professional registration with a relevant professional body
- Participation in Departmental, School, College and University committees including workplace committees or task teams and voluntary associations.
- NRF rating or eligibility to apply for rating.
- Involvement in industry-based research
- Involvement in Engaged Scholarship or Community Engagement
- Evidence of external funding in the relevant field of research and collaboration with other researchers, both nationally and internationally.

**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
INSTITUTE FOR NANOTECHNOLOGY AND WATER
SUSTAINABILITY
SCIENCE CAMPUS (FLORIDA)
SENIOR LECTURER X3
LECTURER X2**

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

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.

Senior Lecturer (X1): Analytical and Environmental Research (Ref.CSET/New/SL-AER/04-2023)

Post specific requirements for Senior Lecturer:

- A Doctorate in Analytical Chemistry, Applied Chemistry, Water/Environmental Science or Environmental Engineering or equivalent
- Candidate must have a 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.

- Additionally, the candidate must have track record in ability to handle Analytical Instruments, analytical work covering different type of matrices, with aspects of toxicology and risk assessment.
- 3 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.

Recommendation:

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

Senior Lecturer (X2): Urban Water Cycle and Water Treatment Technologies (Ref.CSET/New/SL-UWCWTT/05-2023)

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

Recommendation:

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

Lecturer (X1): Membrane Science and Technology (Ref.CSET/New/L-MST/06-2023)

Post specific requirements for Lecturer:

- A Doctorate in Chemistry, Materials Science/Engineering, Nanoscience, Water/Environmental Science or Environmental Engineering or equivalent
- The candidate must demonstrate excellent understanding of the fundamentals of membrane Technology; specifically, the design, preparation and application of innovative membrane material for various purposes such as water treatment, seawater desalination and gas separation.
- The successful applicant must clearly demonstrate research on incorporation of nanoparticles into support matrices for Removal of Pollutants from water and resource recovery.
- 1 year 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.

Lecturer (X1): Nanostructured Materials (Ref.CSET/New/L-NM/07-2023)

Post specific requirements for Lecturer:

- A Doctorate in Chemistry, Materials Science/Engineering, Nanoscience, Water/Environmental Science or Environmental Engineering or equivalent
- Candidate must have a track record in one of the following fields Photocatalytic Materials, Advanced Oxidation Processes, synthesis of nanostructured materials and other materials based on composite structures with application in Water Treatment well as for application in Acid Mine Drainage remediation.
- 1 year 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.

**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF SCIENCE
DEPARTMENT OF STATISTICS
SCIENCE CAMPUS (FLORIDA)
LECTURER X1**

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

Lecturer (X1): Statistics (Ref.CSET/New/L-St/08-2023)

Post specific requirements for Lecturer:

- Masters in Statistics.
- Candidates should have a strong background in Mathematical Statistics (or Mathematics and Statistics) from their undergraduate and Honours or equivalent degrees.
- Experience of using statistical and mathematical software packages (e.g. SAS, R, SPSS, STATA, Mathematica and Matlab).
- 1 year relevant teaching/work/relevant experience.

Field of Expertise for this position

- We are looking for candidates with expertise to teach Mathematical Statistics modules at undergraduate and honours levels.

Recommendations

- Registration for a PhD in Statistics with evidence of good progress towards the qualification.
- Knowledge in Data Science.
- Experience to teach in an online environment.

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF COMPUTING
SCIENCE CAMPUS (FLORIDA)
LECTURER X2 (P8): MINING ENGINEERING
LECTURER X1 (P8): MINE SURVEYING

Lecturer (X2): Mining Engineering (Ref.CSET/New/L-ME/09-2023)

Post specific requirements for Lecturer:

- A Master s Degree in Engineering with special interest in Mining Engineering or related field
- Eligibility to register with the Engineering Council of South Africa (ECSA)

Or

- A Bachelor s Degree in Engineering with special interest in Mining Engineering or related field
- Registration with the Engineering Council of South Africa (ECSA)
- Proof of registration of a Master s Degree in Engineering

Recommendations:

- Possession of a PhD qualification would be an advantage.
- Undergraduate Qualifications in Mining Engineering
- Relevant teaching/work experience in the higher education sector with emphasis in an Open
- Distance e-Learning environment

Lecturer (X1): Mine Sureying (Ref.CSET/New/L-MS/10-2023)

Post specific requirements for Lecturer:

- A Master s Degree with special interest in Geomatic Sciences, Mining and Environmental
- Geology, Mineral Resource Management (MRM) or related field
- Eligibility to register with the South African Geomatics Council (SAGC) or South African Council
- of Natural Scientific Professions (SACNASP)

OR

- A Bachelor s Degree with special interest in Geomatic Sciences, Mining and Environmental
- Geology, Mineral Resource Management (MRM) or related field
- Registration with the South African Geomatics Council (SAGC) or South African Council of Natural
- Scientific Professions (SACNASP)
- Proof of registration of a Master s Degree

Recommendations:

- Possession of a PhD qualification would be an advantage.
- Undergraduate Qualifications in Geomatic Sciences, Mining and Environmental Geology, Mineral
- Resource Management (MRM) or related field

- Relevant teaching/work experience in the higher education sector with emphasis in an Open Distance e-Learning environment

**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
SCHOOL OF COMPUTING
SCIENCE CAMPUS (FLORIDA)
LECTURER X1 (P8): INFORMATION SYSTEMS**

Lecturer (X1): Information Systems (Ref.CSET/New/L-IS/11-2023)

Post specific requirements for Lecturer:

- A Computing degree at NQF level 8 or equivalent and proof of registration for the masters.
- degree in Information System or Information Technology.
- Candidates research must be aligned with the Departments research interests.
- Appropriate industry experience will be considered.

Field of Expertise for this position

- We are looking for one candidate who has a desire to grow in academe.

Recommendations:

- Be in possession or registered for an appropriate PhD in Information System or Information Technology.
- Relevant teaching/work experience in the higher education sector with emphasis in an Open Distance e-Learning environment
- We are looking for one candidate who has a desire to grow in academe.

**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-Ad2/P-CE/12-2023)

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 Masters AND Doctoral candidates to completion

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- 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

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

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

Professor (X1): Electrical Engineering *(Ref.CSET/Re-Ad2/P-EE/13-2023)*

Post specific requirements for Professor:

- A Doctoral degree in Electrical Engineering or equivalent plus experience/track record as a researcher for a position of Professor.
- A BSc or BEng in Electrical Engineering, or a BTech in Electrical Engineering.
- A proven record of supervision of Masters 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 for this position

Interested in applications from all areas of Electrical Engineering but particularly interested in applications from candidates working in Telecommunications, Machine learning, Power Systems or control systems.

Experience:

- The candidate must have relevant teaching/work experience in the higher education sector.

Recommendations:

- Membership of the South African Institute of Electrical Engineers.
- Professional registration with ECSA or registration in process.
- Have an NRF rating or eligibility to apply for rating.
- Experience with teaching in an Open Distance e-Learning environment.
- Participation in departmental, school, college and University committees including workplace committees or task teams and voluntary associations.
- Participation in community engagement projects.

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	:	31 March 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.