

# **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

# COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY SCHOOL OF SCIENCE DEPARTMENT OF MATHEMATICAL SCIENCES FLORIDA-SCIENCE CAMPUS (FLORIDA) FULL PROFESSOR (P5) X1: PURE MATHEMATICS FULL PROFESSOR/ ASSOCIATE PROFESSOR (P5/P6) X1: ASTRONOMY FULL PROFESSOR/ ASSOCIATE PROFESSOR (P5/P6) X1: FINANCIAL 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/Re-Ad/P-PMath/10-2023)

#### 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 ths 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.

#### Professor/ Associate Professor (X1): Astronomy (Ref.CSET/Re-Ad/P.AP-MathsAs/20-2023)

# Post specific requirements for Professor:

- A Doctorate degree or equivalent in Astronomy/Astrophysics
- 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 will need to be able to lead curriculum development of both new and existing modules. A passion for teaching and research in Astronomy is highly sought after.

- Experience in using optical telescopes will be a useful skill that will be utilised in the Unisa Observatory and in spearheading astronomy outreach events using our portable GOTO telescopes. The candidate should have an interest, and preferably experience, in using South African astronomical research facilities such as SALT, other optical/IR telescopes in Sutherland, MeerKAT, HESS, HERA or HIRAX.
- The candidate should have a track record of high-quality publications in Astronomy. Preference will be given to a radio astronomer and a candidate with research interests that align with the current research direction at Unisa.

# **Recommendations:**

- Ability to lecture in an online environment
- An NRF rating or proof of application thereof would be an advantage

# Post specific requirements for Associate Professor:

- A Doctorate degree or equivalent in Astronomy/Astrophysics
- 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 students to completion.

# Field of Expertise for this position

- The candidate will need to be able to lead curriculum development of both new and existing modules. A passion for teaching and research in Astronomy is highly sought after.
- Experience in using optical telescopes will be a useful skill that will be utilised in the Unisa Observatory and in spearheading astronomy outreach events using our portable GOTO telescopes. The candidate should have an interest, and preferably experience, in using South African astronomical research facilities such as SALT, other optical/IR telescopes in Sutherland, MeerKAT, HESS, HERA or HIRAX.
- The candidate should have a track record of high-quality publications in Astronomy. Preference will be given to a radio astronomer and a candidate with research interests that align with the current research direction at Unisa.

# **Recommendations:**

- Ability to lecture in an online environment
- An NRF rating or proof of application thereof would be an advantage

# Professor/ Associate Professor (X1): Financial Mathematics (Ref.CSET/Re-Ad/P.AP-MathsFM/30-2023)

#### Post specific requirements for Professor:

- A Doctorate degree or equivalent in Financial 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 proven record of supervision of research Masters and Doctoral students to completion.

# Field of Expertise for this position

A PhD in Financial Mathematics or closely related fields (such as Stochastic calculus, Stochastic partial differential equations Financial Engineering, Actuarial Science, or Quantitative Risk Management).

The applicant will be expected to teach modules and supervise postgraduate students (MSc and PhD) in Financial Mathematics, in support of the Department's portfolio of transformation and postgraduate programmes in Financial Mathematics. Software Development Skills, i.e., Mathematical Programming in Python, Sage, Matlab, or C++ will be an added advantage.

# **Recommendations:**

- Ability to lecture in an online environment
- An NRF rating or proof of application thereof would be an advantage

#### Post specific requirements for Associate Professor:

- A Doctorate degree or equivalent in Financial 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 proven record of supervision of research Masters students to completion.

#### Field of Expertise for this position

A PhD in Financial Mathematics or closely related fields (such as Stochastic calculus, Stochastic partial differential equations Financial Engineering, Actuarial Science, or Quantitative Risk Management).

The applicant will be expected to teach modules and supervise postgraduate students (MSc and PhD) in Financial Mathematics, in support of the Department's portfolio of transformation and postgraduate programmes in Financial Mathematics. Software Development Skills, i.e., Mathematical Programming in Python, Sage, Matlab, or C++ will be an added advantage.

#### **Recommendations:**

- Ability to lecture in an online environment
- An NRF rating or proof of application thereof would be an advantage

#### Senior Lecturer (X1): Pure Mathematics (Ref.CSET/ Re-Ad/SL-PuMath/40-2023)

#### 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 project

# COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY

# SCHOOL OF SCIENCE

# **DEPARTMENT OF STATISTICS**

# **SCIENCE CAMPUS (FLORIDA)**

# FULL PROFESSIOR/ ASSOCIATE PROFESSOR X1: STATISTICS

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

#### Professor/ Associate Professor (X1): Statistics (Ref.CSET/Re-Ad/P.AP-Stats/50-2023)

#### Post specific requirements for Professor:

- A Doctoral degree in Statistics.
- Candidates should have a strong background in Mathematical Statistics (or Mathematics and Statistics) from their undergraduate and Honours or equivalent degrees.
- 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 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.
- Candidates should have a strong background in Mathematical Statistics (or Mathematics and Statistics) from their undergraduate and Honours or equivalent degrees.
- 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 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 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.

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	: 25 August 2023 (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</u> <u>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 <u>excluding</u> 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 <u>CSET2PA@unisa.ac.za</u>
- 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.

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