

*Are you a quality driven individual?
Do you have a passion for perfection?*

If you answered Yes to these questions, you could be just the individual we are looking for.

MASTERS STUDENTSHIP: MECHATRONIC/MECHANICAL

Bursary value of R120 000.00 per annum (excluding prescribed registration and tuition fees)

Overview of the Organisation

The NMISA is a Type 3A Public Entity established in accordance with the Measurement Unit and Measurement Standards Act, No. 18 of 2006 (the Act). The NMISA is mandated by the Act to provide for the use of the international system of units (the SI) and other measurement units in South Africa, to maintain national measurement standards (NMS) and to determine and ensure the comparability of the NMS. More information can be obtained from www.nmisa.org

PURPOSE OF THE ROLE

NMISA maintains and disseminates the National Standard for Length and this includes research into new areas of measurements in industry. The largest single measurement area in industry is the Co-ordinate Metrology Measurements (CMM) and this study is to research a new concept of CMM measurements, thereby improving the accuracy of CMM measurements.

MINIMUM QUALIFICATIONS, SKILLS AND EXPERIENCE

- BEng (mechatronic or mechanical), or being in the final year of Honours studies for the corresponding degree
- Understanding of kinematics fundamentals (essential requirement)
- NMISA is collaborating with the University of Stellenbosch (SUN) on the research project, the candidate must meet requirements to study towards a Master's degree at SUN.
- Report writing skills
- MS Word and Excel
- CAD- Inventor

PROJECT DESCRIPTION

The project aims to investigate the different current system setups for CMMs, from the traditional Cartesian model to newer designs.

Develop new model based on previous work developed by NMISA and SUN.

Calculate uncertainty coefficients for all uncertainty contributors based on the new Model above.

PERSON SPECIFICATION

The ideal candidate will possess the following qualities and competencies:

- Strong attention to detail
- A keen interest in mechanical design
- Enthusiastic and self-motivated
- Good reasoning ability focused on problem solving with independent, proactive action
- Good planning and organising skills with analytical approach to work tasks
- Honesty and ethical behaviour are of the utmost importance when delivering on assigned tasks within NMISA and SUN
- Ability to function within a team to achieve a common goal

Please note:

NMISA subscribes to and applies the principles prescribed by the Employment Equity Act. Preference will be given to previously disadvantaged candidates who meet the requirements and who will add to the cultural and gender diversity of the organisation. The NMISA Human Capital Development programme, which this Master's Studentship forms part of, is focused on recruiting the following candidates in order of preference: Coloured, African & Indians.

Interested and suitably qualified persons may forward all supporting documentation required (updated CV, certified educational qualifications, certified academic record and certified ID.) when applying for the position email NMISA Human Resource at careers@nmisa.org Only candidates with all supporting documents will be considered for the position.

Clearly indicate which position you are applying for.

People with disabilities are encouraged to apply

Closing date for applications: **31 October 2020**

Correspondence will be limited to short-listed candidates only.

By applying for this position at the NMISA, the applicant understands, consents and agrees that the NMISA may solicit a credit and criminal report from a registered credit bureau and/or the SAPS in relation to positions that require trust and honesty and/or entails the handling of cash or finances and may also verify the applicant's educational qualifications and employment history.