

# SENIOR LECTURER/ASSOCIATE PROFESSOR/PROFESSOR: MECHANICAL ENGINEERING DESIGN

(PERMANENT POST)

### **Department of Mechanical Engineering**

## **Faculty of Engineering and the Built Environment**

The University of Cape Town is in the top rank of Universities in South Africa, and the Department of Mechanical Engineering endeavours to contribute to this reputation. This is achieved through world class research in niche areas (e.g., structural impact and materials engineering, computational mechanics and fluid dynamics, energy studies, engineering education, among others), as well as through excellent teaching based on sound pedagogical principles. The Department is well established, internationally accredited, and has historically produced some of the country's most competent mechanical engineers.

The Department of Mechanical Engineering seeks to appoint a permanent, full-time academic at the Senior Lecturer, Associate Professor, or Professor level to undertake teaching in mechanical engineering design, and to research in the fields of engineering design or mechanical engineering. The successful candidate will be expected to contribute to teaching, administration, research, and social responsiveness activities in the Department. We invite suitably qualified persons to apply for this position.

## Requirements for the position:

#### For all levels:

- A BSc (Eng) or BEng in Mechanical, Mechanical & Mechatronics, or Electro-Mechanical Engineering.
- Able to register as a Professional Engineer (PrEng) as defined by ECSA (PrTech is not sufficient)
- An MSc in engineering with relevant design process industrial experience, or a PhD in engineering.
- Demonstrable experience of the mechanical engineering design process and machine design.
- Experience of undergraduate and/or postgraduate teaching.
- Research track record, including recent peer-reviewed research publications.

#### For appointment at Senior Lecturer level:

Either via the professional practice route

• An MSc in engineering with at least 5 years of relevant design process industrial experience.

Or via the academic route

- PhD in engineering.
- A growing reputation as a researcher, as demonstrated by publications in accredited journals, post-graduate supervision and professional involvement.
- Is recognized as a teacher who makes a meaningful contribution to undergraduate and/or postgraduate teaching, is involved in curriculum design and development, and is responsive to the needs of students.

#### For appointment at Associate Professor level:

Either via the professional practice route

• An MSc in engineering with at least 10 years of relevant design process industrial experience.

Or via the academic route

- · PhD in engineering.
- An excellent reputation for leadership as a researcher, as demonstrated by publications in accredited journals, post-graduate supervision and high-level professional involvement.
- Is recognized as an effective teacher who makes a substantial contribution to undergraduate and/or postgraduate teaching, is active in curriculum design and development, and is responsive to the needs of students.

#### For appointment at Professor level:

- A PhD in engineering.
- An outstanding reputation for leadership as a researcher, as demonstrated by publications in accredited journals, post-graduate supervision including PhD, high-level professional involvement and international recognition.
- Is recognized as an excellent teacher who makes a major contribution to undergraduate and/or postgraduate teaching, provides leadership in curriculum design and development, and is responsive to the needs of students.

#### Demonstrated qualities that would further inform the level of appointment:

- A track record of research projects, securing funding and research publications.
- Experience in the management of courses, staff and/or research projects.
- Experience of the management and leadership of projects, and supervision of research students.
- Contribution to curriculum development at course and/or programme level.
- National Research Foundation (NRF) rating as a researcher, or potential for such rating.
- Postdoctoral research experience, or relevant industrial experience in engineering industry and/or academia.

#### The successful candidate will be expected to:

- Contribute to the teaching of courses within the department, primarily mechanical engineering design, including
  the lecturing and supervision of students, developing course material and contributing to excellence in
  undergraduate and postgraduate teaching.
- Conduct research, attract funding, supervise postgraduate students, publish in accredited journals, and contribute to excellence in research in the Department.
- Contribute to administration and leadership in the Department.

• Contribute to the Department's social responsiveness by engaging with community and/or industry through teaching and research.

The annual remuneration package, including benefits, is:

Senior Lecturer: R 1, 027 040
 Associate Professor: R 1, 232 882
 Professor: R 1, 504 192

To apply, please e-mail the below documents in a single pdf file to Ms Abigail Dixon at recruitment03@uct.ac.za

- UCT Application Form (download at <a href="http://forms.uct.ac.za/hr201.doc">http://forms.uct.ac.za/hr201.doc</a>);
- Motivation letter, highlighting the relevant experience; and
- A detailed curriculum vitae.

Please indicate the position applying and ensure the title and reference number are indicated in the subject line.

An application which does not comply with the above requirements will be regarded as incomplete and might not be considered. Only shortlisted candidates will be contacted and may be required to undergo competency assessments and/or submit a portfolio of recent work.

**Telephone:** 021 650 1673 **Website:** <u>www.mecheng.uct.ac.za</u>

**Reference number:** E230282 **Closing date:** 26 July 2023

UCT is a designated employer and is committed to the pursuit of excellence, diversity, and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups. Our Employment Equity Policy is available at <a href="https://www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf">www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf</a>.

UCT reserves the right not to appoint.