

Postdoctoral Research Fellowship: Innovative Engineering Curriculum National Project (Engineering Education)

The Innovative Engineering Curriculum (IEC) initiative is a multi-institutional national project supporting systemic curriculum transformation across South African Engineering Schools. Since 2021, the project has supported academic development, curriculum renewal, accreditation-aligned innovation, and the integration of professional competencies, sustainability, and safety across engineering education through national and international partnerships.

About the Post-Doc Research Position

The fellowship is collaboratively hosted between the University of Pretoria and the University of Stellenbosch, led by Prof Karin Wolff, with access to a national team of engineering education researchers and practitioners. The position will launch in September 2026.

The postdoctoral fellow will contribute to a growing national body of work focused on understanding and supporting educational change in engineering higher education. The research will explore institutional capacity for curriculum transformation, leadership and facilitation for change, academic development, systemic barriers to implementation, and the role of communities of practice in sustaining long-term change across institutions.

The fellowship will also support longitudinal research tracking the influence of initiatives such as Change Makers and the Transformative Teaching in Engineering Education (TTEE) programme on staff development, curriculum renewal, and institutional change processes across South African universities.

Why Apply?

This fellowship offers the opportunity to:

- Contribute to a nationally significant engineering education initiative with influence across South African universities.
- Conduct impactful research on curriculum transformation, academic development, and systemic change in higher education.
- Publish collaboratively and develop an independent research profile.
- Engage with national and international networks and research partnerships.
- Participate in a vibrant intellectual environment including national workshops, writing retreats, community engagements, and collaborations with CREE (UCT), SASEE, EERN-Africa, TERSTEM, and international partners.
- Develop experience in both research and large-scale educational change processes.

Key Responsibilities

- Conduct independent and collaborative research within the scope of the programme.
- Lead and contribute to academic publications and dissemination outputs.
- Support monitoring, evaluation, and evidence-building activities across institutions.

- Assist with coordination of workshops, institutional engagements, and capacity-building initiatives.
- Contribute to qualitative and mixed-methods research activities, including interviews, thematic analysis, and longitudinal tracking.
- Engage with national and international engineering education partners and networks.

Eligibility Criteria

- PhD completed within the past five years in a relevant field. These may include Engineering Education, Higher Education Studies, Science Education, Educational Psychology, Psychology, Sociology, Industrial Engineering, Information Systems, or related disciplines.
- Demonstrated expertise in the management, statistical analysis, and interpretation of large educational datasets, including cohort and longitudinal data, with proficiency in relevant statistical software and the ability to generate evidence-based insights to inform engineering education research, policy, and student success initiatives.
- Demonstrated interest in educational change, curriculum development, academic development, or engineering education research.
- Emerging publication track record appropriate for postdoctoral level.
- Strong qualitative research, facilitation, organisational, or project coordination skills will be advantageous.
- Ability to work independently and collaboratively across institutions.
- Have obtained their doctoral degrees within the last five years at the time of application.
- Excellent communication skills in English.
- Candidates who have not graduated when applying must provide a letter of completion before commencing with the fellowship.

Fellowship Details

Location: University of Pretoria, Hatfield Campus, with travel to partner institutions across South Africa.

Duration: One-year contract, renewable based on performance and funding.

Value: Fellowship stipend of R290,000 (tax free), with limited support for approved research-related travel and development.

Start Date: Flexible, earliest start date 15 September 2026.

Please note: This is a fellowship appointment and does not constitute permanent employment. Fellows may not hold another full-time position during the fellowship period.

Application Process

Please submit the following documents to Ms Sharne Mokhethi, Project Administrator, at sharne.mokhethi@up.ac.za, with the subject line: Postdoc Application – Innovative Engineering Curriculum

Required documents:

- Cover letter outlining motivation, research interests, and alignment with the programme (maximum 2 pages)
- Detailed CV including publications

- Contact details of two academic referees
- One example of academic writing (published article, thesis chapter, or conference paper)

Closing date: 31 July 2026, 16h00 SAST