

STEM Education Lead

Status: Full-time, initially one-year contract
Reports to: The AIMSSEC Academic Manager
Indirectly reports to: The Director, AIMS South Africa
Duty Station: AIMS South Africa

About AIMS

The African Institute for Mathematical Sciences (AIMS) is a pan-African network of Centres of Excellence for post-graduate training, research, and public engagement in mathematical sciences. The network comprises six AIMS Centres in five countries, of which AIMS South Africa is one.

AIMSSEC (AIMS Schools Enrichment Centre)

The African Institute for Mathematical Sciences Schools Enrichment Centre (AIMSSEC) adds value to South Africa's educational landscape in mathematical sciences education with a vision to empower school communities through mathematical excellence and equity. The centre's offer includes flexible and cutting-edge mathematical science education programs that empower educators, teachers, and learners with the knowledge and tools needed to nurture the mathematical potential of all, particularly girls.

Job Overview

The role has three components: Teaching, STEM Innovation and Research.

Teaching. As a mathematical sciences educator/teacher, you will understand the socioeconomic challenges of teachers and learners in South Africa and want to contribute to their progress towards meeting their potential. Most teachers who attend our blended learning courses teach in rural or township schools, although our learners are on the Cape Flats.

STEM Innovation. Historically, AIMSSEC has only taught school mathematics to teachers. We want to expand our offer to include up-to-date, cutting-edge mathematical sciences beyond a school curriculum to empower passionate teachers with a vision for their learners.

Research. We want to document evidence-based STEM education research in high-impact factor journals.

Responsibilities

- Support the Academic Manager in integrating innovative STEM education that contributes toward building the pipeline into meaningful mathematical sciences.
- Work alongside the Education Technology Lead to integrate relevant science, technology, and/or engineering into our offering to educators, teachers, and learners.
- Responsible for course material design and impactful practices for its implementation.

AIMS South Africa Council

David Holgate (Chair, University of the Western Cape), Daya Reddy (University of Cape Town), Grae Worster (University of Cambridge), Kerstin Jordaan (University of South Africa), Mike Giles (University of Oxford), Neil Turok (University of Edinburgh), Sibusiso Moyo (Stellenbosch University), Thandi Mgwebi (Nelson Mandela Metropolitan University), Ulrich Paquet (AIMS)

- Deliver courses to AIMSSEC educators and teachers based on expertise.
- Regularly reporting to the Academic Manager.
- Actively contribute to the compilation of information for STEM education reporting to funders.
- Contribute towards educational research.
- Identifying and assisting in increasing the visibility of AIMSSEC on different (social) media platforms.

Required Skills

- A PhD in a STEM education discipline.
- Ability to understand and communicate (written and oral) complex conceptual and theoretical frameworks linked to a South African education landscape.
- Project-based experience.
- Record of research outputs and evidence of professional/academic (social) media engagement.
- Experience in teaching adults and learners/young adults.

Working conditions

- Based in Muizenberg, South Africa
- We deliver our teacher training courses during the school holidays in January and June/July, pending school dates. Each course requires you to be away from home for ten days, which is compulsory for all AIMSSEC staff.
- Learner participation means minimum interference with school teaching days, so AIMSSEC teaching occurs on some Saturdays.

Applications

If you believe in creating a society where mathematical excellence is accessible and want to be part of a dynamic team whose passion is to empower educators, teachers and learners to thrive academically, professionally, and personally, then please submit your CV together with a letter motivating the value you can bring to AIMSSEC and AIMS South Africa as a whole.

FAO: Dr Sinobia Kenny vacancies@aims.ac.za

Applications will be accepted until **15 November 2024**.

AIMS South Africa reserves the right not to make an appointment at its sole discretion. AIMS is an equal opportunity employer.

AIMS South Africa Council

David Holgate (Chair, University of the Western Cape), Daya Reddy (University of Cape Town), Grae Worster (University of Cambridge), Kerstin Jordaan (University of South Africa), Mike Giles (University of Oxford), Neil Turok (University of Edinburgh), Sibusiso Moyo (Stellenbosch University), Thandi Mgwebi (Nelson Mandela Metropolitan University), Ulrich Paquet (AIMS)