Master of Science
in the field of
Interdisciplinary
Global Change Studies
(CW/RR)

Building the next generation of resilient thinkers
Disciplinarity is still the predominant basis upon which knowledge, skills, people, problems, research orientations and methodologies are organised at Wits. Although disciplinarity allows people to specialise and become experts at what they do, it also creates the problem of ‘disciplinary silos’ when experts from different disciplines cannot engage with each other or share their knowledge beyond the boundaries of their discipline.

There is increasing recognition that the formidable interlinked global challenges including climate change, increasing populations, fossil fuel shortages, ensuring increasing agricultural yields in the face of dwindling supplies of land and water and loss of biodiversity require expertise in the dynamic functioning of interlinked human and natural systems and demand a cross-disciplinary approach to problem-solving.

New Masters Programme in Global Change

Recognising this need, the University of the Witwatersrand offers a new Masters Programme in Global Change (by coursework and research report) hosted by the Faculty of Science, that aims to enhance capacity for multi-, inter- and transdisciplinary research in the area of global and climate change. The programme encourages shared understanding of different disciplinary conceptual frames, key problematics and methodologies, development of integrative research tools and the human capacities they require and enhanced networks for collaborative learning and problem-solving.

Core Module and Electives

The degree consists of coursework and research components, comprising one compulsory core module and several elective modules, as well as a (preferably) cross-disciplinary research project in the area of global change. The core module aims to facilitate a multi- and transdisciplinary understanding of global change and will be presented in block-release format with four 3-4 day face-to-face sessions over a full academic year. Formal and informal interaction between students, in the form of discussion groups, coaching, online tutorials, reflection and journaling, will continue between each session.

This module will employ an approach to teaching and learning intended to foster transformation among students and develop dynamic leadership skills. This will be achieved in part through an emphasis on facilitation rather than a didactic approach.

Critical thinking and leadership are important skills for resilient thinkers and global change actors, and these skills will be reinforced throughout the foundation module by means of discussion, response to texts, group work, and case studies.

The core module’s sessions will focus on the following:

**Session 1** – Background and introduction to global change, analytical theories and tools
**Session 2** – Personal development (values, beliefs, leadership)
**Sessions 3 - 4** – current issues in global change, which may include:
- energy,
- water scarcity,
- ecosystem decline,
- food security,
- urbanisation and migration,
- economics, ethics, income disparity and financial systems,
- other climate change related concerns such as extreme events, greenhouse gas emissions and climate change policies.

The core module will be complemented by three to five elective modules which contribute to the overall qualification and which will deepen the students’ discipline skills in the following areas:

- Business and the Environment
- Climate Change
- Design for Environment
- Environmental Impacts
- Environmental Law and Policy
- Environmental Planning and Management
- Ethics in Biology
- Sustainability/Sustainable Development
Research component

Each student must complete a research project which will focus on global change and involve an inter- or transdisciplinary approach. Supervision will be provided from the appropriate Faculty or Department determined by the project’s disciplinary focus. Co-supervision across faculties will be encouraged.

Applicants with a BSc Hons, BA Hons, B Comm Hons or equivalent four year degree will be considered. Short-listed applicants will be invited for an interview before a final decision is made.

Awarding of the degree

The degree of Masters of Science in the field of interdisciplinary Global Change Studies will be awarded once a student has completed the compulsory core module (30 points) and optional courses to a total minimum of 60 points, as well as the compulsory research component (90 points). Students can register for full-time or part-time studies. While the degree is awarded by the Faculty of Science, the student does not require a pure science background to succeed in this programme.

Applications for 2019

Applications should be submitted online at https://www.wits.ac.za/postgraduate/applications/

For more information please contact
Dr Ute Schwaibold at ute.schwaibold@wits.ac.za