



ATTENTION POST-GRAD STUDENTS:

The Durban Research Action Partnership (D'RAP) has commenced its fourth phase of the Global Environmental Change (GEC) programme. Bursaries are available for **Masters candidates** to make contributions to this.

Background

D'RAP is a joint research partnership between the University of KwaZulu-Natal (UKZN) and the eThekweni Municipality (ET). The Global Environmental Change (GEC) research programme will run from 2024 until 2026. The main goal of this fourth phase is to localise GEC research, using transdisciplinary approaches that incorporate academic expertise for directed impact on municipal line functions as they respond to climate change risks, as captured within the Durban Climate Change Implementation Plan. This includes both natural and social science aspects.

Research topics

Proposed research projects should include one or more of the following topics to support implementation of projects within the Durban Climate Change Implementation Plan:

- Understanding the buffering effects of D'MOSS (and other natural/semi natural areas) on climate change. This research will investigate D'MOSS (and other natural/semi natural areas) and ecosystem function to identify and understand priority areas for curbing climate change impacts (flooding, urban heat islands, carbon storage, etc.).
- Understanding the invasion of natural grasslands by extensive stands of bracken fern. What are the drivers of this shift, and how does this shift impact on biodiversity and ecosystem service provision by these grasslands? What is the best approach to control bracken fern?
- What are the impacts of climate change on heat stress among individuals with and without mental health challenges engaged in urban agricultural activity? Impact of climate change on mental health (as define by stress, depression, anxiety and trauma symptoms)
- Understanding heat in Durban: Ground Truth existing heat mapping and identify hotspots for implementation. Produce policy paper on heat for Durban.
- Modelling river to waste beneficiation: Produce a business plan to convert river waste to beneficial materials

For more information about the Durban Climate Change Implementation Plan:

<https://www.durban.gov.za/pages/residents/climate-change-strategy>

<https://climate-change-ethekweni.hub.arcgis.com/pages/dccs-implementation-framework>

How to apply

Identify which topic is of interest and approach a supervisor who can oversee the project. An application can then be submitted to the D'RAP research coordinator **by the supervisor** and must include the following:

1. Student applicant's CV
2. Student applicant's written letter of motivation for support
3. Project proposal as per the template*
4. Supervisor evaluation and confirmation of support of student as per the template*

***Templates are available here (copy the links into your browser):**

D'RAP GEC P4 Supervisor Support Template:

<https://docs.google.com/document/d/1W1mCTGsMEV1NSt2CP2R9Eaz1o9cfVZDFQgQAOm-sBwc/edit?usp=sharing>

D'RAP GEC P4 Project Proposal Template:

https://docs.google.com/document/d/1yz2KRjdg0yMCsa5HBss_5XHbiTWfRi7BpUkxZEDEEqI/edit?usp=sharing

To submit and for any queries, please email the D'RAP research coordinator at
SinghP7@ukzn.ac.za

APPLICATION CLOSING DATE: Sunday, 02 March 2025