

# TRAINING COURSE

ON HYDROLOGICAL ANALYSIS AND MODELING UNDER CHANGING CLIMATE AND ENVIRONMENT

## Course and Workshop Conveners



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 **University of Malawi, Zomba, Malawi**

## INTRODUCTION

Many regions of southern Africa face increased risk of flooding as well as water shortages due to effects of climate change and increased population on ecosystems. Understanding how changes in climate and local anthropogenic pressure (e.g. changes in land-use or -management) influence environmental processes is key to achieving sustainable management of the ecosystems. It is recognized that water and environmental managers need skills and up to date knowledge on current practices in the sector. The proposed short course, an integration of the natural sciences and engineering, is therefore designed to provide such skills and knowledge for the management water resources, ecosystems and the environment.

The motivation for organizing this training course stemmed from the desire to provide an opportunity for young water resources practitioners in Malawi and Tanzania to learn current issues and trends in hydrological analysis and modeling from water resources, climate change and environmental management perspectives.

## WHO SHOULD ATTEND?

The course is suitable for Master and PhD students, junior scientists and practicing engineers in the field who are engaged in water and the environment areas such as hydrology (including hydrological modeling and analysis). Those interested to increase their knowledge and learn more about modeling tools to solve hydrological problems for resources assessment, simulation, forecasting and possibly optimization of hydrological and water resources systems are encouraged. The course is intended to be at graduate level.

On the last date of the training course, participants will give a 2 minute presentation on their background, interests and motivation. Experienced participants will be encouraged to give a short presentation during the workshop on their own or a national study of modeling, possibly linked with climate change to share knowledge. Participants shall receive a certificate of attendance after completing the Course, provided they have actively taken part in the course and completed the assignments.

## COURSE MATERIAL

The course material and related documents will be made available for the accepted applicants before the course starts.

## ORGANIZATION AND SPONSOR

This is a 2-day training course organized by Norad's NORHED II, University of Malawi, University of Oslo, University of Dar es Salaam and Mzuzu University.

The training course is financially sponsored by the NORHED II (The Norwegian Programme for Capacity Development in Higher Education and Research for Development) project and the Research Council of Norway (FRINATEK Project 274310), implying that the costs for travel, subsistence and course material will be partly covered.

The course will be delivered through lectures by eminent scientists in water and environment from four Universities on Day 1 and part of Day 2. This will be followed on Day 2 (half day) by a workshop hydrological modelling calibration, validation and output analysis. Some local experts on water resources and the environment will be invited to give a presentation in the workshop.

## APPLICATION

Qualified applicants (graduate students, junior scientists and government employees) are invited to complete the Application Form, by including CV (2 pages maximum). Applications should be sent by email to: [mpanda@unima.ac.mw/harec@unima.ac.mw](mailto:mpanda@unima.ac.mw/harec@unima.ac.mw).

Limited space is available for **9 participants only outside the NORHED II Project**.

Applications should be sent no later than 12th September 2022

For more information, please contact the Ms Rosemary Mpanda of the Natural Resources and Environment Centre (NAREC) at UNIMA.

Email: [mpanda@unima.ac.mw/harec@unima.ac.mw](mailto:mpanda@unima.ac.mw/harec@unima.ac.mw)

