FACULTY OF ENGINEERING & THE BUILT ENVIRONMENT





Dept. of Civil Engineering | CPD Courses

Tailings Storage Facility Design, Construction and Management

30 September – 4 October 2024





Introduction



The master's programme with a specialisation in Geotechnical Engineering is intended to support high level training and enhance both the technical skills of recent graduates or experienced personnel who work in, or aspire to a career in civil engineering construction, consulting, environmental and related industries. The primary purpose of the programme is to provide advanced conceptual understanding, detailed factual geotechnical knowledge, and specialist technical skills appropriate for postgraduates who wish to widen their professional scope and work towards a career in the field of geotechnical engineering. For further information about this master's programme please visit the website: http://www.civil.uct.ac.za/msc-engineering-specialising-geotechnical-engineering

Continuing Professional Development

Modules of this master's programme are offered to Continuing Professional Development delegates as 5 separate certificate courses from which a participant can obtain CPD credits. All the courses consist of 5 days of formal lectures at the University of Cape Town.

Who should attend?

The courses are best suited for Civil Engineers, Consultants, Architects, Engineering Geologists, Geotechnical Engineers and Geologists, Bridge Engineers, Landscape Architects, Contractors, Soil Scientists, Project managers, City and Public Works Officials, City Planners, and other design professionals who address construction related issues.

Format

The courses will be presented in a hybrid format (online and face-to-face). Online course participants will need computer access and a reliable internet connection.





FACULTY OF ENGINEERING & THE BUILT ENVIRONMENT | DEPT. OF MECHANICAL ENGINEERING TAILINGS STORAGE FACLTY DESIGN CONSTRUCTON AND MANAGEMENT | PAGE 2 OF 4



Course content

This course focuses on the characterisation and geotechniques of mine tailings, tailings storage facility (TSF) siting, tailings disposal and storage options. Participants will be introduced to the design of TSFs and seepage, stress deformation and stability analysis methods. It will also cover development of TSF water balance, water management, dam break and risk analysis. Basics of TSF closure options, closure designs and reclamation will be addressed.

Course Convenor



Professor Denis Kalumba is a prominent figure in geotechnical engineering. He currently leads the University of Cape Town's (UCT) Geotechnical Engineering Division within the Civil Engineering department of the Faculty of Engineering & the Built Environment. Professor Kalumba's expertise is grounded in his PhD from the University of Newcastle upon Tyne. His leadership extends beyond UCT, as evidenced by his active involvement in prestigious organizations such as the International Society for Soil Mechanics and Geotechnical Engineering and the South Africa Institution of Civil Engineering (SAICE) – Geotechnical Engineering Division.

Overview

Course	Tailings Storage Facility Design, Construction and Management, CIV5162Z
Duration	30 September – 3 October 2024.
Venue	University of Cape Town or online
CPD	5 CPD points, ECSA validated: UCTGTETSFD24
Fees	Standard fee: R16 500 (5-day course) * UCT student fee: R8 250
Participants	Civil Engineers, Consultants, Architects, Engineering Geologists, Geotechnical Engineers and Geologists, Bridge Engineers, Landscape Architects, Contractors, Soil Scientists, Project managers, City and Public Works Officials, City Planners

*10% discount will apply if the course is attended online only.





Registration

Registration and Cancellation

- <u>Register for this course</u>
- Registration covers attendance of all course sessions and the electronic copies of the course notes.
- Registrations close one week before the start of the course. Confirmation of acceptance will be sent on receipt of a registration form.
- Cancellations must be received one week before the start of a course, or the full course fee will be charged.
- For more information on application and registration procedures, please visit our website: <u>www.cpd.uct.ac.za/cpd/registration-policies</u>

Certificates and CPD Points

A certificate of attendance will be awarded to CPD participants. Participants need to attend 80% of the lectures to qualify for an attendance certificate.

CPD participants can also request a formal university transcript, which will show this course as part of a Professional Development Career. The ECSA validation number for this course is UCTGTETSFD24.

Please note: If you are interested in attending this course for credit purposes, you will need to register for the master's programme or as an occasional student.

For further information about the master's programme, please contact <u>denis.kalumba@uct.ac.za</u> If you attend the course as a CPD participant, credit cannot be claimed in retrospect.

Contact details

For more information or details on CPD courses, visit our website or contact us.

Web:http://www.cpd.uct.ac.zaEmail:ebe-cpd@uct.ac.za

Physical address

CPD Programme Room 6.10, 6th Floor. New Engineering Building Upper Campus University of Cape Town South Africa

Programme administrators

Gillian Williams: +27 (0)21 650 7239 Sandra Jemaar: +27 (0)21 650 5793 Heidi Tait: +27 (0)21 650 4922

Postal address

CPD Programme EBE Faculty University of Cape Town Private Bag X3 Rondebosch 7701 South Africa

Programme Convenor

Denis Kalumba: +27 (0)21 650 2590



