FACULTY OF
ENGINEERING &
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CPD
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UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD
ENGINEERING & THE BUILT ENVIRONMENT

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GEOTECHNICAL ENGINEERING
UNIVERSITY OF CAPE TOWN

Slope Stability and Lateral Earth Supports

In person in Cape Town, 25 – 27 November 2025

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

SPES BONA

Introduction

The course focuses on stability of natural slopes and stability considerations related to man-made cuts and fills. Participants will be introduced to the different slide mechanisms, the conditions of their occurrence, the theories and principles governing stability of slopes. It will also cover the selection, design and performance of earth retention structures, consequently equipping participants with fundamentals and working tools needed for the design and analyses of earth retaining structures and systems.

Course Aims

The course aims to:

1. Demonstrate the application of the concepts, principles and theories of slopes
2. Understand the different slope stabilization techniques, their applicability and limitations
3. Understand the advanced analysis of the lateral earth pressures, and
4. Introduce participants to various earth retention systems, their design, applicability and limitations

Course Learning Outcomes

By the end of the course, the participants should be able to :

1. Demonstrate a good knowledge and understanding of essential facts, concepts, theories and principles of slopes
2. Have a working knowledge of effective engineering approaches to identify and analyse unstable slopes
3. Understanding how slope failures, caused by natural and human activities, are identified, prevented, and controlled
4. Identify the types, advantages and disadvantages of the different earth retaining systems (e.g. gravity structures, piles, etc.)
5. Quantify the lateral earth pressures associated with different earth retaining systems
6. Analyse and select the most technically appropriate type of retaining wall for a given project based on a clear understanding of the different available systems

Who should attend

Civil Engineers, Consultants, Architects, Engineering Geologists, Geotechnical Engineers and Geologists, Bridge Engineers, Contractors, Project managers, City and Public Works Officials, City Planners.

Course Instructor

Professor Denis Kalumba is a well-regarded academic in the Geotechnical Engineering field. He is based at the University of Cape Town, where he contributes to teaching, research, and various projects within the Civil Engineering Department. His expertise spans several areas of geotechnical engineering, and he is known for his contributions to academic literature and practical applications. Professor Kalumba's work often involves collaboration with industry professionals and international scholars, enhancing the impact of his research and teaching on a global scale. His outstanding contributions to geotechnical engineering have earned him several recognitions, including the prestigious South African Geotechnical Engineering Gold Medal.

Overview

Course	Slope Stability and Lateral Earth Supports
Duration	25 – 27 November 2025
Venue	UCT, Cape Town
CPD	3 CPD points, ECSA validated: UCTSSLES25
Fees	R13 568

Registration

Registration and Cancellation

- Register online
- Registration covers attendance of all sessions of the workshop, teas and lunches, and a set of 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.

Certificates and CPD Points

A digital certificate of attendance will be awarded to CPD participants. Participants need to attend 80% of the lectures to qualify for an attendance certificate. For further information on digital certificates please visit Digital Certificates at UCT

This course is registered with the Engineering Council of South Africa (ECSA) for the award of 3 CPD points. The ECSA course validation code is: UCTSSLES25

Contact detail

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

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