

# SHORT COURSE: Soil Behaviour

DEPARTMENT OF CIVIL ENGINEERING • 20 - 22 May 2026

## COURSE COORDINATOR

Dr TS da Silva Burke

## FEES

3-day course  
R7,200

## ECSA CPD POINTS

3 points

**Only digital certificates will be issued - Please choose this option when registering.**

## LANGUAGE

The course will be presented in English.

## CONTACT

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## DESCRIPTION

What makes soil behave the way it does? Soil is a particulate material and the interaction between individual particles and the voids between them results in the behaviour of soil being a function of the stresses and void ratio. Critical state soil mechanics provides a framework that unifies shear and consolidation behaviour of soils and allows prediction of soil strength and deformation as a function of initial state, loading and drainage conditions. In this course participants will learn the theory defining the critical state line and constitutive models based on this theory, namely Cam-Clay and NorSand.

## OBJECTIVES

To be able to understand and apply the theory of critical state soil mechanics.

## OUTCOMES

- Appreciate the importance and implication of the particulate nature of soil.
- Explain the rationale behind and apply the theory of critical state soil mechanics (CSSM).
- Interpret and analyse expected soil behaviour based on the state parameter.
- Describe, compare and apply constitutive models incorporating CSSM, namely Cam-Clay and NorSand, including interpretation of input parameters from soil element tests.
- Characterise in situ soils and model expected soil behaviour.

## COURSE ARRANGEMENTS

This course will be presented face-to-face on the Stellenbosch Campus. Details will be forwarded to registered delegates once payment has been received.

[CLICK HERE TO REGISTER](#)

## REGISTRATIONS

Registrations close:  
15 May 2026

All payments are due by:  
18 May 2026

Payment confirms registration.

