



SHORT COURSE: ADVANCED BITUMEN TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING • 24 - 28 March 2025



COURSE COORDINATOR

Prof Kim Jenkins
(SANRAL Chair)

CO-PRESENTER:

Prof. Martin van de Ven (TUD)
Dr. Elaine Goosen (SU)
Mr. Steph Bredenhann (Naidu)

FEES:

Face-to-face
R 11 500.00

ECSA CPD POINTS

5 points

Please Note: Only digital
certificates will be issued

LANGUAGE

The course will be presented
in English.

CONTACT

Ms. Le-Ann Williams
021 808 4131
civilcourses@sun.ac.za

GOALS OF THE COURSE

This course focuses on important applications and developments in the field of bituminous binders. It includes bond and tack coats, emulsions, seal binders, asphalt binders, modified binders as well as alternative binders e.g. bio-binders, amongst others.

Rheology of binders and appropriate test methods will be explained and modelled. Workshop sessions will be used for both empirical and fundamental testing to demonstrate the binder characteristics, behaviour and performance in the Bitumen Laboratory, PGRL. The link between binder parameters, their influence of binder ageing and their performance will be covered.

The evolution of binder classification and recent developments of Performance Grading PG Binders, provides the basis of new SA Specifications, This is important for industry.

Recent international developments in binder technology, mastics, modifiers, bio-fuels will be shared, covering production to design and application. A Site visit at a special facility is on the cards.

LEARNING PROCESS

The delegates will have the opportunity to immerse themselves in the subject matter, through a series of lectures that will be augmented by workshops. Laboratory session including Penetration, Softening Point, DSR, BBR and binder recovery, will be covered. The course concept of immersion and group work, is a very successful format of all attendants.

ADMISSION REQUIREMENTS

This course forms part of the University of Stellenbosch postgraduate programme. It carries fifteen (15) SAQA credits for academic purposes and/or continuing education based upon an extensive exercise.

Certificates will be awarded to all non-students participating satisfactorily in the course.



forward together
sonke siya phambili
saam vorentoe

COURSE ARRANGEMENTS

The course will be presented **face-to-face**.

Registration will be from 7h30

The fee covers all course materials
and meals.

COURSE OUTLINE

Module 1 - Bitumen Origin & Basics

Module 2 - Rheology and Test Methods

Module 3 - Hinder Parameters & Models

Module 4 - Ageing and Durability

Module 5 - PG Binder Specifications and
International Developments



REGISTRATION LINK

PLEASE READ THE T's & C's

Registrations close: **19 March 2025**

Payments due: **21 March 2025**

PAYMENT CONFIRMS REGISTRATION