

SHORT COURSE: PAVEMENT MATERIALS III

DEPARTMENT OF CIVIL ENGINEERING • 26 Feb - 1 Mar 2024

COURSE COORDINATOR

Prof KJ Jenkins
SANRAL Chair
Stellenbosch University

CO-PRESENTERS

Dr Fenella Johns
Mr André Greyling

FEES:

5-day course
R 11 500.00

ECSA CPD POINTS

5 points

LANGUAGE

The course will be presented
in English.

PROGRAMME

Detailed timetable will be
sent to registered delegates

CONTACT

Janine Myburgh
021 808 2080
civilcourses@sun.ac.za

GOALS OF THE COURSE

This course focuses on important developments in the field of Bitumen Stabilised Materials (BSMs) - in particular, the updates to the SA Guidelines for design and use of BSM (Foamed Bitumen and Emulsion). In particular, TG2 Manual (2020) will be covered, based on research findings and best practice.

Aspects to be covered on the course include binder characteristics, material classification, mix design, structural design and construction. Mix compositions will be explored with attention to the factors that control the behaviour and performance of BSMs, including compacting, curing, resistance to permanent deformation and durability. New laboratory test methods and design functions for BSM pavement layers will also be covered.

COURSE OUTLINE

- Module 1 - BSM Binders
- Module 2 - Aggregate and Filler Requirements
- Module 3 - Mix Design
- Module 4 - BSM Classification & Pavement Design
- Module 5 - Construction & Specification

LEARNING PROCESSES

The delegates will have the opportunity to immerse themselves in the subject matter, through a series of lectures that will be augmented by workshop sessions. The immersion course concept has been very successful.

**PLEASE NOTE: ONLY DIGITAL CERTIFICATES WILL BE ISSUED,
PLEASE CHOOSE THIS OPTION WHEN REGISTERING**

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

Closing date: 12 February 2024
Payment due: 19 February 2024

Payment confirms registration.

DRAFT

PAVEMENT MATERIALS III COURSE (BSMs)

26 FEBRUARY – 1 MARCH 2024

TIME TABLE

Lectures	Monday Feb 26	Tuesday Feb 27	Wednesday Feb 28	Thursday Feb 29	Friday Mar 1
8:15 1	Registration	Group Feedback from Workshop (KJ)	Group Feedback from Workshop (KJ)	Group Feedback from Workshop (KJ)	Group Feedback from Workshop (KJ/DC)
9:15 2	Opening & Introduction (KJ)	Pavement Investigation I (AG)	Compaction of BSMs NEW Lab vs Field (KJ)	Pathway to rehab design incl DEMAC (FJ)	Construction of BSMs in Place (DC)
10:15	T E A				
10:30 3	Pavement Material Characteristics: What is a BSM? (KJ)	Pavement Investigation II (AG)	Project Selection for BSMs (AG)	Structural Design of BSM - PN (FJ)	Construction of BSMs in Plant (AGL)
11:30 4	Pavement Fundamentals including BSM (KJ)	Types of Projects for BSMs (AG)	Intro NEW Mix Design Procedures (KJ)	Workshop 4 Structural Design (FJ, KJ)	Case Studies / Specification and QC of BSMs (DC)
12:30	L U N C H				
13:30 5	Binder Characterisation for BSMs (KJ)	Bitumen Emulsion Binder (KL)	NEW Mix Design Procedures (KJ)	Structural Design of BSM - ME (FJ)	Certificates, Evaluation, Closure (KJ)
14:30 6	Role of Active Filler in BSM (KJ)	Bitumen Emulsion Tests (NR)	BSM Curing & Mix Properties (KJ)	Structural Design of BSM - ME (KJ)	
15:30	T E A				
15:45 7	Aggregate Requirements for BSM-foam (KJ)	Laboratory Session: Emulsion & Foam (PGs/KL)	Linking Mix with BSM Performance (KJ)	Workshop 5 Structural Design Stress Strain (FJ, KJ)	
16:45 8	Aggregate Requirements for BSM-emulsion (KJ)	Laboratory Session: Emulsion & Foam (PGs/KL)	Durability of BSMs and LTPP Studies (KJ)	Workshop 5 Structural Design Sensitivity exc. (FJ, KJ)	
17:00 - 17:30	Workshop 1 BSM Binder Properties & Performance (KJ)	Workshop 2 BSM Design using Stress Ratio (KJ)	Workshop 3 BSM Design using Stress Ratio etc(KJ)	CLOSING FUNCTION	

Lecturers: (FJ) ---- Fenella Johns (NR) ---- Nteseng Ramoraswi
(KJ) ---- Kim Jenkins
(AHG) ---- André Greyling (AGL) ---- Andrew Geel
(KL) ---- Kobus Louw

All lectures and workshops to be held in Auditorium