



UNIVERSITY OF STELLENBOSCH

&

**THE INSTITUTE FOR GEOTECHNICS,
MANAGEMENT AND TRANSPORT**

in conjunction with

SANRAL CHAIR

will present a course in

PAVEMENT MANAGEMENT SYSTEMS

28 AUGUST – 1 SEPTEMBER 2017

Gerrie van Zyl

MyCube Asset Management Systems

Kim Jenkins

SANRAL Chair: University of Stellenbosch

**An intensive residential course at
The University of Stellenbosch**

GOALS OF THIS COURSE

This course focuses on pavement management of surfaced and gravel roads. South Africa has some 150 000 kms of surfaced roads and 600 000 kms of unsurfaced roads. It is therefore imperative that sound management principles are applied to this network, differentiating between the respective authorities' appropriate requirements.

The PMS course is aimed at engineers, technologists and senior technicians who are:

- considering implementing a pavement management system in their network or becoming involved in a PMS;
- involved in a PMS and wish to upgrade their knowledge.

The theory covered in the modules shown alongside, will be put into practice by delegates working in groups, with the development of a PMS as part of the workshops. Comprehensive notes will be provided.

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 and tutorials.

ACADEMIC CREDIT

Pavement Management Systems (PO5) forms part of the University of Stellenbosch postgraduate programme. It carries fifteen (15) SAQA credits for academic purposes based upon an extensive exercise and written/oral examination and/or CPD. Certificates will be awarded to all delegates participating satisfactorily in the course. CPD credits = 5.

LANGUAGE & REGISTRATION

This course will be conducted in English. However, questions, assignments and examinations can be presented in either English or Afrikaans.

Enrolment numbers will be restricted. Registration, with payment, will be accepted on a first received basis. Return the registration details to:

Mrs Janine Myburgh: jmyburgh@sun.ac.za
Tel: 021-808 2080 Fax: 086 544 3146
Prof KJ Jenkins: kjenkins@sun.ac.za

COURSE OUTLINE

MODULE 1

THE PAVEMENT MANAGEMENT PROCESS

- Principles of Integrated Road Management
- PMS as part of Integrated Road Management (TMH22)
- Interdependency of Road Management sub-systems
- Building blocks of a PMS

Practical: Structuring of a PMS in a road authority.

MODULE 2

PAVEMENT CONDITION SURVEYS

- Visual pavement assessment (TMH 9)
- Mechanical surveillance (FWD, HSP, etc)
- Condition description (VCI, IRI etc)

Practical: Field visual assessment

MODULE 3

ANALYSIS

- Identification of needs and maintenance alternatives
- Deterioration modelling and project prioritisation
- Economic analysis and optimization
- Analysis Tools (incl Neural Networks etc)

Practical: Deterioration modelling & demos of PMS's

MODULE 4

PMS OPERATION

- Development (incl HDM4 etc as background)
- Implementation
- Operational aspects (incl GPS, GIS etc)
- Communication, reporting, etc.

Practical: Preparation of a multi-year programme with alternative strategies to fit varying budgets

MODULE 5

PMS TRENDS AND PROJECT PRESENTATIONS

- Latest trends in PMS and technology

Evaluation: Presentation of developed PMS's by each of the groups



UNIVERSITEIT van STELLENBOSCH

&

**DIE INSTITUUT VIR
GEOTEGNIEK, VERVOER EN BESTUUR**

in samewerking met

SANRAL LEERSTOEL

bied 'n kursus aan oor

PLAVEISEL BESTUURSTELSELS

28 AUGUSTUS – 1 SEPTEMBER 2017

Gerrie van Zyl
My Cube Raadgewers

Kim Jenkins
SANRAL Leerstoel: Universiteit van Stellenbosch

**'n Intensiewe residensiële kursus by
die Universiteit van Stellenbosch**

KURSUSDOELSTELLINGS

Hierdie kursus fokus op die bestuur van gruis- en geplaveide paaie. Omtrent 150 000 km van Suid Afrika se paaie is geplaveide paaie en sowat 600 000 kms is steeds ongeplavei. Dit is dus baie belangrik dat korrekte bestuursbeginsels, wat onderskei tussen die verskillende owerhede se vereistes, vir hierdie netwerke toegepas word.

Die PBS kursus is gemik op ingenieurs, tegnoloë en senior tegnisi wat:

- daaraan dink om 'n plaveiselbestuurstelsel (PBS) in hul netwerk te implimenteer, of wat betrokke wil raak by PBS.
- reeds betrokke is in 'n PBS en hul kennis wil verbeter.

Die teorie wat in die modules bespreek sal word, sal ook prakties aangewend word deur afgevaardigdes wat in groepe saamwerk om 'n PBS te ontwikkel tydens die werkwinkels. Omvattende notas sal beskikbaar gestel word.

LEERPROSES

Afgevaardigdes sal die geleentheid hê om in diepte met die kursus materiaal vertrou te raak; die reeks lesings sal aangevul word met tutoriale en werkwinkelsessies.

AKADEMIESE KREDIETE

Hierdie kursus vorm deel van die nagraadse kursusprogram van Universiteit van Stellenbosch. Dit dra vyftien (15) SAQA krediete vir akademiese- en/of voortgesette onderwys doeleindes, onderworpe aan eksaminering. Kandidate sal 'n bywoningssertifikaat ontvang. CPD krediete = 5.

REGISTRASIE

Die kursus sal in Engels aangebied word, u mag egter vrae, take en eksamens in Engels of Afrikaans voltooi.

Registrasie sal aanvaar word op 'n eerste-ontvangs en – betaal basis. Stuur die registrasievorms aan:

Mev Janine Myburgh : jmyburgh@sun.ac.za
Tel: 021-808 2080 Fax: 086 544 3146
Prof KJ Jenkins: kjenkins@sun.ac.za (021-808 4379)

LECTURING STAFF

Mr Gerrie van Zyl MEng PrEng

My Cube Asset Management Systems. He is involved with the development and operation of numerous pavement management and other road infrastructure management systems within SA and outside its borders.

Prof Kim Jenkins PhD PrEng

SANRAL Chair of Pavement Engineering at the University of Stellenbosch.

Other specialists from Road Authorities, Tertiary Institutions, Companies etc will also present lectures.

ADMISSION REQUIREMENTS

The course is aimed at practicing engineers, technologists and senior technicians who wish to augment and update their knowledge of technical engineering concepts in PMS. A degree or diploma in Civil Engineering plus several years' experience in pavement engineering is required.

COURSE ARRANGEMENTS

To gain full benefit of the course, delegates are required to work in groups and individually and must be prepared to work in the evenings.

Accommodation should be arranged from the evening before the course starts at any of the local guesthouses. Information is available on request.

Participation is limited

The course fee covers academic notes and activities, refreshments, lunch and dinner. The fee is subvented by SANRAL.

Lectures and workshops will be held at the University in Auditorium S202 in the Civil Engineering Building.

Please remember to indicate whether you have any dietary preferences.

**REGISTRATION DETAILS
PAVEMENT MANAGEMENT SYSTEMS**

28 AUG – 1 SEPT 2017

(Please complete ALL details)

First Name and Surname:

.....

Occupation:

Qualifications:

Experience:

.....

Invoice for attention: (Name & e-mail)

.....

.....

Employer:

Employer Address:

.....

Tel:(B)

Cell:

Fax:

Email:

Student No. (US)			
Examination for Academic Credit	YES	NO	
Food Preference (all food is Halaal)	VEGAN	VEGETARIAN	

COURSE FEE (Please indicate)

Course Fee: R 7500.00

Students: R1550.00

Accommodation

Contact any local guesthouse.

(List available on request)

Registration will be approved on a first-received, first-paid basis.

Course Secretary: Mrs. Janine Myburgh
Tel: (021) 808-2080 Fax: 086 544 3146
E-mail: jmyburgh@sun.ac.za

**REGISTRASIEBESONDERHEDE
PLAVEISEL BESTUURSTELSELS**

28 AUG – 1 SEPT 2017

(Vul asb. ALLE besonderhede in)

Noemnaam en Van:

.....

Beroep:

Kwalifikasies:

Ondervinding:

.....

Faktuur vir Aandag: (Naam en e-pos)

.....

.....

Werkgewer:

Adres:

.....

Tel:(B)

Sel:

Faks:

Epos:

Studentenr (US)			
Eksamen vir Akademiese Krediet	JA	NEE	
Kos Voorkeur (alle kos is Halaal)	VEGAN	VEGETARIES	

KURSUSGELDE (Dui asb aan)

Kursusfooi: R 7500.00

Studente fooi: R1550.00

Verblyf

Nader plaaslike gastehuisse.

(Lys op aanvraag beskikbaar)

Registrasie sal op 'n eerste-betalings-basis aanvaar word.

Kursussekretaresse: Me. Janine Myburgh
Tel: (021) 808-2080 Faks: 086 544 3146
E-pos: jmyburgh@sun.ac.za

Please read and sign below

“Cancellations will be accepted in writing and without penalty, up to 10 working days prior to commencement of the course. Participants cancelling in writing less than 10 working days prior to commencement of the course will be liable for a 50% cancellation fee. Following registration without attendance and without written cancellation, delegates will be held responsible for the full course cost.”

I HAVE READ AND AGREE TO THE CONDITIONS OF
REGISTRATION AS STIPULATED ABOVE

SIGNATURE

DATE:

**CLOSING DATE FOR APPLICATIONS:
14 August 2017**

