



SHORT COURSE IN FLOOD HYDROLOGY

Offered by The Division of Water Engineering of the University of Stellenbosch with support of Royal Academy of Engineering

COURSE DESCRIPTION

FREE: Flood Design Software (Excel-based)

for all methods presented in the SANRAL Road Drainage Manual will be available to all delegates

OBJECTIVE

The objective of this course is to transfer advance knowledge on flood calculation methods to the practicing engineer from industry and post graduate students. The opportunity will also be used to provide input towards the National Flood Study Program to update and improve all flood calculation methods in use in South Africa. Ample opportunity will be available for discussions on practical experiences and lessons learned. All methods will be illustrated with appropriate practical sessions.

OUTCOMES

A clear understanding of all flood calculation methods in use, with specific references to practical interpretation of results. The latest research findings on flood related topics from various academic institutions will be presented.

LANGUAGE

The course will be presented in English.

ECSCA CPD points = 3

COURSE ARRANGEMENTS

The fee covers course material as well as teas and lunches.
A detailed program is attached.

REGISTRATIONS CLOSE 13 AUGUST 2018

Course registration is at 08h00 and starts at 08h30 on 27 August 2018 in Room S202 of the Civil Engineering Building, University of Stellenbosch. Participants are responsible for their own accommodation. Information on local guesthouses and hotels is available from the course secretary .



DATES

27-29 AUGUST 2018

PRESENTERS

Prof Kobus du Plessis
Prof Jeff Smithers
Mr Danie van der Spuy
Dr Jaco Gericke
Mr Pieter Rademeyer
Dr Lloyd Fisher-Jeffes
Mr Jeremy Naidoo
Mr Richard Nell
Mr Stuart Dunsmore
Mr J Verwey

FEES

3 Day COURSE : R7 900

*Delegates from Government
Department:*

*Please contact us for a specific
quotation (Special tariff apply)*

US Student fee: R1 000

CONTACTS:

MS TSHOLO SEROALO
Phone: 021 808 4131

OR

MS JANINE MYBURGH
Phone: 021 808 2080

E-mail:

civilcourses@sun.ac.za

ROYAL
ACADEMY OF
ENGINEERING





Three Day Short Course on Flood Hydrology

Offered with the support of Royal Academy of Engineers

27-29 AUGUST 2018

PROGRAMME				
DATE	FROM	SUBJECT	SPEAKER	INSTITUTE
Monday: 27-Aug-2018	08h00	Registration		US
	08h30	Welcome	JA du Plessis	US
	08h45	Flood management strategy for City of Cape Town	R Nell	CoCT
	09h45	Design Flood Estimation in South Africa: Overview and way forward	J Smithers	UKZN
	10h45	Tea 10h45 – 11h00		
	11h00	Catchment characteristics	J Naidoo	DWS
	11h30	Design Rainfall Estimation in South Africa	J Smithers	UKZN
	12h30	Lunch 12h30 - 13h15		
	13h15	Areal Reduction Factors	JA du Plessis	US
	14h15	Graphical Representation and Numerical description of data and Data acquisition and Information	D van der Spuy	DWS
	14h30	Impact of veld fires on flood peaks	JA Du Plessis	US
	15h00	Tea 15h00 – 15h15		
	15h15	Urban Flood calculations	L Fisher-Jeffes	Aurecon
Tuesday: 28-Aug-2018	08h30	Deterministic methods: SCS	J Smithers	UKZN
	09h30	Deterministic methods: Rational	P Rademeyer	DWS
	10h00	Deterministic methods: Direct Runoff Hydrograph	P Rademeyer	DWS
	10h30	Tea 10h30 – 11h00		
	11h00	Deterministic methods: Synthetic Unit Hydrograph	JA Du Plessis	US
	12h00	Regionally Pooled Joint Peak-Volume Design Floods for SA	J Smithers	UKZN
	13h00	Lunch 13h00-13h45		
	13h45	Statistical methods and Probability Distribution.	D van der Spuy	DWS
	14h15	Statistical Analysis – a practical approach	D van der Spuy	DWS
	15h00	Tea 15h00 – 15h15		
	15h15	Practical (case study)	P Rademeyer	DWS
	Wed: 29-August-2018	08h30	Standard Design Flood	J Gericke
09h30		Empirical methods: Midgley and Pitman Method and Catchment Parameter Method	D van der Spuy	DWS
10h00		Tea 10h00 – 10h30		
10h30		RMF – A Review	JA du Plessis J Verwey	US / DWS
11h00		Good practice and best methods - discussion	S Dunsmore	Fourth Element
12h00		Backwater calculations – theoretical background	D van der Spuy	DWS
12h30		Lunch 12h30-13h15		
13h15		Backwater calculations – practical pointers	D van der Spuy	DWS
14h00		GIS applications for flood calculations	J Gericke	CUT FS
15h00		Demonstration of flood calculation software tools	J Gericke & JA du Plessis	CUT FS US
16h00		Closure	JA du Plessis	US

Note: *CPD commenced in January 2006 whereby all professional engineering persons are required to obtain 25 credits over a 5 year cycle, with a minimum of 3 credits per year, for renewal of registration with ECSA from 2007. This course is a Category 1 activity and offers 3 credits. A maximum of 4 credits may be accumulated under this category per year. For more details see www.ecsa.co.za

FLOOD HYDROLOGY COURSE 2018

SCOPE

This three day course on ***Flood Hydrology*** has been structured in collaboration with and presenters from the Department of Water and Sanitation, Universities and various consultants. The course deals with the principles used, but also provides practical tips for the more experienced practitioners, which will be demonstrated during tutorial sessions. This course was last presented in 2016.

VENUE

S202, 2nd floor, Department of Civil Engineering, University of Stellenbosch, Western Cape, SOUTH AFRICA

REGISTRATION : To reserve a place, please complete the attached registration form and return to civilcourses@sun.ac.za.

You also need to register electronically on the following URL:

<http://shortcourses.sun.ac.za/application-form.html?offeringid=6e003b5b-867e-e811-9d66-0050568000ff>

On receipt of the electronic application form, an invoice will be sent to participants within three (3) working days.

REGISTRATION : US registered students

Please complete the registration form sent to you and return to civilcourses@sun.ac.za

COURSE FEES (exempt from VAT)

R7, 900.00 for 3 days (Includes tea, lunch and course material)

A daily fee of **R3500** is applicable should you be interested to attend 1 or 2 days only.

Delegates from Government: Please contact us for a specific quotation

US registered students: R 1000.00

CLOSING DATE FOR REGISTRATION AND PAYMENT: 13 August 2018

The fee for late registration after 13 August 2018 will be 20% more than the above fees.

Enquiries can be directed to:

Ms Tsholofelo Seroalo
Dept Civil Engineering,
Stellenbosch University
Tel: +27 21 808 4131
Email: civilcourses@sun.ac.za

or

Prof JA du Plessis
Dept Civil Engineering,
Stellenbosch University
Tel: +27 21 808 4358
Email: jadup@sun.ac.za



REGISTRATION FORM FLOOD HYDROLOGY

PERSONAL DETAILS

Title:	Surname:	Full Name:
Student Number:		
Tel:		Fax:
Cell:		Email:

COMPANY DETAILS

Company Name:	
Postal Address:	Office Address:

ATTENDANCE & PAYMENT DETAILS:

Attendance of course including light lunch, tea/coffee and course notes:	R...../delegate	
In whose name should the invoice be issued:	Company	Attendant
Please specify any special dietary requirements:		

REQUEST FOR USER MANUAL

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>

A **user manual** for the free software, that will be made available at the course, is available upon request at an additional cost of **R400.00**. Should you want to order a user manual, kindly indicate by ticking the necessary box and forward it to civilcourses@sun.ac.za **after completion of the electronic application.**

SIGNATURE: _____

DATE: _____