



Three and a half Day Course on River Hydraulics, Stormwater & Flood management

Tuesday 9 to Friday 12 June 2009

Venue: Protea Hotel Techno Park, Stellenbosch, SOUTH AFRICA

ECSA Continuing Professional Development (CPD) accredited course*
PRELIMINARY PROGRAMME

09-Jun-09	Duration	Tuesday		
Start Time	Min	Description	Presenter(s)	Organisation
7:30 to 8:30	60	Registration		
8:30 to 9:15	45	Catchment, Stormwater & River management in Cape Town	Barry Wood	City Cape Town
9:15 to 10:00	45	Stormwater canal design	Dr Aldu le Grange	BKS
10:00 to 10:30	30	Tea		
10:30 to 11:15	45	Coastal flooding, erosion & protection	Eddie Bosman	Univ Stellenbosch
11:15 to 12:00	45	Underwater Surveys		
12:00 to 12:45	45	Reserve determination	Dr. Verno Jonker	Ninham Shand
12:45 to 13:45	60	Lunch		
13:45 to 14:30	45	Culvert Hydraulics & energy dissipation	Francis Stoffberg	KweziV3
14:30 to 15:15	45	Stormwater Drainage design considerations		
15:15 to 15:45	30	Tea		
15:45 to 16:30	45	River Fluvial Morphology: analysis and modelling	Prof Gerrit Basson	Univ Stellenbosch
16:30 to 17:30	60	US Hydraulic laboratory visit: Greyton River Model	Prof Gerrit Basson	Univ Stellenbosch
10-Jun-09		Wednesday		
8:00 to 8:30	30	Late Registration		
8:30 to 9:15	45	Hydraulic flood routing (2D) case study	Frank Denys	Ninham Shand
9:15 to 10:00	45	Flow measurement techniques	Frans le Roux	DWAF
10:00 to 10:30	30	Tea		
10:30 to 11:15	45	Design of river abstraction works on sediment laden rivers	Prof Gerrit Basson	Univ Stellenbosch
11:15 to 12:00	45	Design & operation of Berg River Supplement Scheme	Stefan Malan	Goba/BRC
12:00 to 16:30	270	Field visit: Berg River Supplement Scheme & Paarl visit: flushing operation & ADCP operation	Stefan Malan/Frans le Roux	BRC/DWAF
11-Jun-09		Thursday		
8:00 to 8:30	30	Late Registration		
8:30 to 9:15	45	Groynes for river bank erosion protection	Hans King	Dep Agriculture
9:15 to 10:00	45	HecRas and CAD application case studies	Malcolm Cerfonteyn	CSi
10:00 to 10:30	30	Tea		
10:30 to 11:15	45	Real time management of river systems	Dr Beason Mwaka	DWAF
11:15 to 12:00	45	Case Study: Fish-Sundays River system real time optimization	Christiaan Visser	Univ Stellenbosch
12:00 to 12:45	45	Case Study: Lower Orange River hydrodynamic model	Dr Aldu Le Grange & Jaco Briers	BKS
12:45 to 13:45	60	Lunch		
13:45 to 14:30	45	Sustainable Urban Drainage Systems (SUDS)	Rod Arnold	City Cape Town
14:30 to 15:15	45	Bridge Hydraulics	Pieter Grobler	Africon
15:15 to 15:45	30	Tea		
15:45 to 16:30	45	Flood Routing: Hydrological and hydraulic methods	Dr. Beason Mwaka	DWAF
12-Jun-09		Friday		
8:00 to 8:30	30	Late Registration		
8:30 to 9:15	45	Water Quality modelling in rivers and lakes/reservoirs	Wageed Kamish	
9:15 to 10:00	45	Estuary hydraulics	Andre Theron & Lara van Niekerk	CSIR
10:00 to 10:30	30	Tea		
10:30 to 11:15	45	Stormwater case study	Trevor Coleman	Golder
11:15 to 12:00	45	Reservoir Sedimentation analysis and modelling	Prof Gerrit Basson	Univ Stellenbosch
12:00 to 12:45	45	Flood Control		
12:45 to 13:00	5	Closure	Prof Gerrit Basson	Univ Stellenbosch

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 3.5 credits. A maximum of 4 credits may be accumulated under this category per year. For more details see www.ecsa.co.za

SCOPE

This 3.5 day course on **River Hydraulics, Stormwater & Flood Management** has been structured to give state-of-the-art theory and practise on river and estuary hydraulics, design of hydraulic structures such as culverts, bridges, river abstraction works, fluvial morphology and river bank protection, water quality, environmental aspects and stormwater design, etc. Mathematical models to describe river flow routing and water quality components will be presented. Presenters are drawn from government, university, consulting engineering companies, municipalities and industry. The course includes a visit to the University of Stellenbosch Hydraulics Laboratory and to the Berg River Project Supplement Scheme where its flushing operation will be demonstrated. The visit includes a field demonstration of the use of ACDP instrumentation for river flow measurement. This popular course was last presented in 2006. Related courses for 2009 could be viewed at www.civeng.sun.ac.za

REGISTRATION FORM – River Hydraulics, Stormwater & Flood Management Course 2009

Kindly complete this registration form and fax it to **fax number +27-21 4130447** or mail the form to:

The Secretary, Institute for Water and Environmental Engineering, Department of Civil Engineering, University of Stellenbosch, River Hydraulics, Stormwater & Flood Management Course 2009, Private Bag X1, MATIELAND, 7602, SOUTH AFRICA. Or by email to: **msb@aspt.co.za**

On receipt of the completed registration form, an invoice will be faxed or emailed to participants within 3 working days. Payment can be made electronically (details will be provided on the invoice) or by cheque, to be made payable to **University of Stellenbosch.**

CLOSING DATE FOR REGISTRATION AND PAYMENT: 25 May 2009

Title	<input type="text"/>	Surname	<input type="text"/>	Name	<input type="text"/>
Company	<input type="text"/>				
	VAT registration number:		Business registration number		
	Postal address:		Street address:		
Tel	()		Fax	()	
Email			Delegate	Y/N	
Special dietary requests			Presenter	Y/N	
Name/Email of person regarding payment			Student	Y/N	

FEES: R6400-00 for 3.5 days (Includes tea, lunch, course notes & presentations)

R5800-00 for 2.5 to 3 days; R5100-00 for 1.5 to 2 days; R3400-00 for 1 day

Indicate dates of attendance: Jun 9 Jun 10 Jun 11 Jun 12

The fee for late registration after 25 May 2009 will be 20 % more than the above fees.

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: _____

Enquiries can be directed to:

Ms L du Preez
Inst for Water & Environmental Engineering
Dept Civil Engineering,
University of Stellenbosch
Tel: +27-21 8082100/0794909210
Email: msb@aspt.co.za or ldpreez@sun.ac.za

or

Prof Gerrit Basson
Inst for Water & Environmental Engineering
Dept Civil Engineering,
University of Stellenbosch/SANCOLD
Tel: +27-21 808 4355
grbasson@sun.ac.za