



Three Day Course on  
**Stormwater, River Hydraulics and Management**

**Wednesday 1 to Friday 3 June 2011**  
**Venue: STIAS, Stellenbosch, SOUTH AFRICA**

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

<b>01-Jun-11 Wednesday</b>			
<b>Start Time</b>	<b>Description</b>	<b>Presenter(s)</b>	<b>Organisation</b>
7:30 to 8:30	Registration		
8:30 to 8:35	Opening	Prof Gerrit Basson	Univ Stellenbosch
8:35 to 9:30	Urban stormwater masterplanning, floodlines and risk	Dr Aldu le Grange & Izak Malherbe	BKS
9:30 to 10:30	Flood warning on the Incomati River	Dr. Verno Jonker	Aurecon
10:30 to 11:00	Tea		
11:00 to 12:00	Modelling of Regional hydrology of Tshwane with SWMM	Matt Braune	SRK
12:00 to 13:00	Survey techniques and accuracy	Surveyor	Surveyor
13:00 to 14:00	Lunch		
14:00 to 15:00	Culvert Hydraulics, energy dissipation and erosion protection	Francis Stoffberg	Worley Parsons
15:00 to 15:30	Tea		
15:30 to 16:30	Stormwater canal design	Dr Aldu le Grange	BKS
<b>02-Jun-11 Thursday</b>			
8:00 to 8:30	Late Registration		
8:30 to 9:00	Bridge Hydraulics	Prof Gerrit Basson	Univ Stellenbosch
9:00 to 10:00	1D hydrodynamic modelling: HecRas application case studies	Malcolm Cerfonteyn	iCE
10:00 to 10:30	Unsteady flow modelling	Christiaan Visser	Univ Stellenbosch
10:30 to 11:00	Tea		
11:00 to 12:00	Stormwater case study	Trevor Coleman	Golder
12:00 to 13:00	Flow measurement techniques	DWA	DWA
13:00 to 14:00	Lunch		
14:00 to 16:30	Berg River Dam site visit: ADCP demonstration on river	DWA	DWA
<b>03-Jun-11 Friday</b>			
8:00 to 8:30	Late Registration		
8:30 to 9:30	River system flood routing and management	DWA	DWA
9:30 to 10:30	2D hydrodynamic modelling of river hydraulics & sediment dynamics	Prof Gerrit Basson	Univ Stellenbosch
10:30 to 11:00	Tea		
11:00 to 12:00	Water Quality Modelling of inland waters	Wageed Kamish	Univ Stellenbosch
12:00 to 12:30	River bank protection: Groynes	Hans King	Dep Agriculture
12:30 to 13:00	River bank protection: Riprap/Reno mattresses	Prof Gerrit Basson	Univ Stellenbosch
13:00 to 14:00	Lunch		
14:00 to 14:30	Bitou Floodline Determination & hazard mapping	Freeternity Rusinga	Aurecon
14:30 to 15:00	Ethekwini Stormwater Master Planning: data capture and PCSWMM	Colin Whitemore	Aurecon
15:00 to 15:30	Tea		
15:30 to 16:30	Estuary hydraulics	Andre Theron & Lara van Niekerk	CSIR

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](http://www.ecsa.co.za)

## **SCOPE**

This 3 day course on **Stormwater, River Hydraulics & Management** has been structured to give state-of-the-art theory and practise on stormwater modelling, river and estuary hydraulics, design of hydraulic structures such as culverts, bridges, river abstraction works, fluvial morphology and river bank protection, water quality, etc. Mathematical models to describe river flow routing and water quality components will be presented. Presenters are drawn from government, university, consulting engineering companies and industry. The course includes a visit to the Berg River Dam and a field demonstration on the use of ADCP instrumentation for river flow measurement. This popular course was last presented in 2009. Related courses for 2011 could be viewed at [www.civeng.sun.ac.za](http://www.civeng.sun.ac.za)

## **REGISTRATION FORM – Stormwater, River Hydraulics & Management Course 2011**

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, Stormwater, River Hydraulics and Management Course 2011, Private Bag X1, MATIELAND, 7602, SOUTH AFRICA.** Or by email to: [msb@aspt.co.za](mailto:msb@aspt.co.za)

On receipt of the completed registration form, an invoice could be emailed to participants if required. 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: 20 May 2011**

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 (no fee)	Y/N	
Name/Email of person regarding payment			U S Student (reduced fee)	Y/N	

**FEES: R6600-00 (Incl. VAT) for 3 days** (Includes tea, lunch, course notes & presentations);

**R5300-00 for 2 days; R3600-00 for 1 day**

Indicate dates of attendance: Jun 1:  Jun 2:  Jun 3:

**The fee for late registration after 20 May 2011 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:**

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