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Three Day Course on

Design and Management of Dams and other Hydraulic Structures

Wednesday 20 to Friday 22 July 2011
Venue: STIAS, Stellenbosch, SOUTH AFRICA

ECSA Continuing Professional Development (CPD) accredited course*

PROGRAMME

20-Jul-11	**Wednesday**		
Start Time	**Description**	**Presenter**	**Organization**
7:30 to 8:30	*Registration*		
8:30 to 8:35	Welcome and introduction	Prof Gerrit Basson	Univ of Stellenbosch
8:35 to 9:30	Planning and site selection	Johann Geringer	Arcus Gibb
9:30 to 10:30	Tunnel Design, Intake Tower Hydraulics, river crossings and outlets	Chris Viljoen	Vela VKE
10:30 to 11:00	*Tea*		
11:00 to 11:45	Design of river abstraction works: LUSIP, Lebalelo, Crocodile, Thukela, etc. case studies	Prof Gerrit Basson	Univ of Stellenbosch
11:45 to 12:45	Neckarthal Dam and abstraction works, Namibia	Edwin Lillie	Knight Piesold
12:45 to 13:45	*Lunch*		
13:45 to 14:45	Flow gauging weir design	Dr Pieter Wessels	DWA
14:45 to 15:15	*Tea*		
15:15 to 16:15	Metolong Dam design and spillway hydraulics	Johann Geringer	Arcus Gibb
21-Jul-11	**Thursday**		
8:00 to 8:30	*Late Registration*		
8:30 to 9:30	Dam Spillway design: state of the art	Prof Gerrit Basson	Univ Stellenbosch
9:30 to 10:30	Irrigation canal design, control structures & rehabilitation	Kobus van Deventer	DWA
10:30 to 11:00	*Tea*		
11:00 to 12:00	Energy dissipation at dams and outlet works design	Dr Mike Shand	Aurecon
12:00 to 13:00	Berg River Dam Project: Spillway,Outlet works and Supplement Scheme	Tente Tente	TCTA
13: 00 to 14:00	*Lunch*		
14:00 to 14:30	Dam outlet structure gate closure hydraulics: Berg River Dam (CFD and Lab)	Doreen Pulle & Adele Vos	Univ Stellenbosch
14:30 to 15:30	New SANCOLD Dam Freeboard Guidelines (2011) and software tools	GR Basson & Tente Tente	US & TCTA
15:30 to 16:00	*Tea*		
16:00 to 17:00	*US Hydraulics Laboratory visit: Dam spillway, river abstraction works and Berg River Dam outlet (1:14 model)*	Prof Gerrit Basson	Univ of Stellenbosch
22-Jul-11	**Friday**		
8:00 to 8:30	*Late Registration*		
8:30 to 9:30	Dam safety legislation, design floods and safety inspections	Jan Nortje & Leo vd Berg	DWA
9:30 to 10:30	Ingula hydropower case study	Dave Johnson	Eskom
10:30 to 11:00	*Tea*		
11:00 to 11:30	Dam break (overtopping) analysis: Mathematical modelling of the physical processes	Vincent Msadala	Univ Stellenbosch
11:30 to 12:30	Ludeke Dam: Design and construction	Mike Udal	MBB
12:30 to 13:30	*Lunch*		
13:30 to 14:30	Imvutshane Dam: Design considerations	Tyler Bain	MBB
14:30 to 15:00	*Tea*		
15:00 to 16:00	Dam rehabilitation: Elandsdrift and Grassridge Dams in the Eastern Cape	Ivor Segers	DWA

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*

SCOPE

This 3 day course on the **Design and Management of Dams and other Hydraulic Structures** has been structured to give state-of-the-art theory and practise on dam site selection, dam design aspects such as dam type, geotechnical and structural aspects, spillways, energy dissipation and outlet works. Dam and rehabilitation designs are explained by 8 case studies on recently designed dams, most of which are currently under construction. The case studies include a hydropower scheme. Apart from dams, the design of other structures such as river abstraction works, water transfer tunnels, and irrigation canals will also be dealt with. Dam safety aspects, design floods and the new guidelines on Freeboard for Dams (SANCOLD, 2011) will also be presented. Presenters are mainly drawn from government, university and consulting engineering companies. The course includes a visit to the Hydraulics Laboratory of the University of Stellenbosch to view the Berg River Dam outlet model etc. Related courses for 2011 could be viewed at www.civeng.sun.ac.za

REGISTRATION FORM-Design and Management of Dams & other Hydraulic Structures 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, Design and Management of Dams and other Hydraulic Structures 2011, Private Bag X1, MATIELAND, 7602, SOUTH AFRICA. Or by email to**: 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: 8 July 2011

Title		Surname		Name	
Company					
	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			US Student (reduced fee)		Y/N

Note: *Halaal at additional cost

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: Jul 20: ☐ Jul 21: ☐ Jul 22: ☐

The fee for late registration after 8 July 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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