

SCOPE

This 3.5 day course on **Water and Wastewater treatment** has been structured to provide the latest and most relevant theory applicable in the field. The course will also look at the application of the theory in practise, legislation and operational aspects which should be considered in the application of the theory. Presenters are drawn from government, university and consulting engineering companies. This course was last presented in 2008.

REGISTRATION FORM – Water and Wastewater Treatment 2010*

Kindly complete this registration form and fax it to **fax number +27-21 8084351** or mail the form to:

The Secretary, Institute for Water and Environmental Engineering, Department of Civil Engineering, University of Stellenbosch, Water and Wastewater Treatment Course 2010, Private Bag X1, MATIELAND, 7602, SOUTH AFRICA. Or by email to: elmienl@sun.ac.za

On receipt of the completed registration form, an invoice will be faxed to participants within 2 to 3 days. Payment can be made electronically (details will be provided on the invoice) or by cheque, to be made payable to **University of Stellenbosch**. Please include a blank company letterhead with your registration form.

CLOSING DATE FOR REGISTRATION AND PAYMENT: 25 January 2010

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: Feb 08 Feb 09 Feb 10 Feb 11

The fee for late registration after 25 January 2010 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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**Institute for Water and Environmental Engineering,
Department of Civil Engineering**



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**Three and a half Day Short Course on
Water and Wastewater Treatment
08 - 11 FEBRUARY 2010**

PRELIMINARY PROGRAMME				
Time	Duration	Topic	Presenter	Organisation
DAY 1				
07:30 - 8:30	60	Registration		
08:30 - 9:15	45	Importance of the administration of legislation	G McConkey	Jantech
09:15 - 10:00	45	Water quality monitoring	W Kloppers	DWA
10:00 - 10:30	30	Tea 10:00 to 10:30		
10:30 - 11:15	45	Water quality modelling fundamentals	W Kamish	US
11:15 - 12:00	45	An introduction to water treatment	B Theunissen	Aurecon
12:00 - 12:45	45	Filtration and coagulation	B Theunissen	Aurecon
12:45 - 13:45	60	Lunch		
13:45 - 14:30	45	Settling & disinfection	H Mazema	PRO&RM
14:30 - 15:15	45	Operation and maintenance of water treatment plants	L Motlhodi	Magalies Water
15:15 - 15:45	30	Tea 15:15 to 15:45		
15:45 - 16:30	45	Desalination	K Du Plessis	US
DAY 2				
8:00 - 8:30	30	Late registration		
8:30 - 9:15	45	Introduction to wastewater treatment : Process and design loads	K Samson	City of Cape Town
9:15 - 10:00	45	Wastewater characteristics : Influence on design	K Samson	City of Cape Town
10:00 - 10:30	30	Tea 10:00 to 10:30		
10:30 - 11:15	45	Activated sludge process - A theoretical overview	M Ramphao	Aurecon
11:15 - 12:00	45	Chemistry of the activated sludge process	P Gaydon	SSI
12:00 - 12:45	45	Biological nutrient removal - nitrogen	A Van Niekerk	Golder Associates
12:45 - 13:45	60	Lunch		
13:45 - 14:30	45	Biological nutrient removal - phosphates	A Van Niekerk	Golder Associates
14:30 - 15:15	45	Nitrogen removal - Towards source reduction	J Wilsenach	CSIR
15:15 - 15:45	30	Tea 15:15 to 15:45		
15:45 - 16:30	45	Activated sludge process - Applications	P Du Preez	Aurecon
DAY 3				
8:00 - 8:30	30	Late registration		
8:30 - 9:15	45	Nutrient removal - Consideration of operational aspects	TBA	TBA
9:15 - 10:00	45	Operation and maintenance aspects of wastewater treatment	L Motlhodi	Magalies Water
10:00 - 10:30	30	Tea 10:00 to 10:30		
10:30-11:15	45	Towards wastewater re-use and recycling	A Van Niekerk	Golder Associates
11:15 - 12:00	45	Sludge handling	H Honey	Aurecon
12:00 - 12:45	45	Sludge treatment and stabilization	TBA	TBA
12:45 - 13:45	60	Lunch		
14:00 - 16:30		Water and wastewater treatment site visit		
Day 4				
08:30 - 9:15	45	Appropriate testing procedures and sampling procedures for water quality management	S Pieterse	City of Cape Town
09:15 - 10:00	45	Reedbeds as an alternative treatment process	J Wilsenach	CSIR
10:00 - 10:30	30	Tea 10:00 to 10:30		
10:30-11:15	45	Comments on the 1mg/l phosphate standard	W R Harding	DHEC
11:15 - 12:00	45	Quantifying the effects of wastewater discharges	W Kamish	US
12:00 - 12:10	10	Closure	W Kamish	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 3.5 credits. A maximum of 4 credits may be accumulated under this category per year. For more details see www.ecsa.co.za