



Dept. of Civil Engineering | CPD Courses

Integrated Urban Water Management

Master's Module
30 July – 1 August 2018



Course Objectives



The aim of this course is to introduce students to integrated urban water management (IUWM). This includes: social imperatives; environmental considerations; politics and water service delivery. Planning for water in the City of Cape Town; servicing the informal settlements of Cape Town. Water supply: key considerations for water reticulation systems; water supply options; household management of water; water demand management; public health considerations. Sanitation: options; managing sanitation in informal settlements. Stormwater: managing stormwater in the City of Cape Town; rehabilitating urban rivers; groundwater issues; Sustainable Drainage Systems (SuDS); catchment litter management. Water Sensitive

Urban Design (WSUD); water management systems; sustainability indicators.

Who Should Attend

The urban infrastructure field requires professionals from a broad range of disciplines. This course is aimed at all professionals (consultants, managers, councillors) who have an interest in urban water management. However, applications will be considered from anyone with an interest in urban infrastructure and with suitable tertiary level qualifications.

Course Format

This CPD course forms part of the Masters level course in Integrated Urban Water Management offered by the Department of Civil Engineering. The CPD course is a 3-day certificated course from which a participant can obtain CPD points. Participants can choose to attend individual days, or the full 3-day course.

Course Convenor



Neil Armitage holds BSc(Eng), MSc(Eng) and PhD degrees from the Universities of Natal, Cape Town and Stellenbosch respectively. He is a professional engineer, registered with the Engineering Council of South Africa (ECSA), with more than 33 years' experience – both as a consultant and an academic – in a wide range of water-related engineering.

He has been employed by UCT since 1995, initially as Senior Lecturer, then from 2005 as an Associate Professor, and finally from 2015 as a Professor in the Civil Engineering Department. He served as Deputy Dean (Undergraduate Affairs) in the Faculty of Engineering and the Built Environment 2011-12 and as Head of the Department of Civil Engineering 2012-17. He co-founded the 'Future Water' research institute in 2015 which he currently serves as Deputy Director. He has authored or co-authored some 100 publications and supervised 19 masters' students and three PhD students to graduation. Inter alia, he was responsible for the development of the South African Guidelines on Sustainable Drainage Systems (SuDS) and Water Sensitive Urban Design (WSUD). In 2013 he received the Water Research Commission of South Africa's Award for Human Capital Development in the Water and Science Sectors.

Research interests

- Urban Water Management (UWM)
- Sustainable Drainage Systems (SuDS)
- Water Sensitive Urban Design (WSUD)
- Sanitation in informal settlements

Lecture Programme

Monday, 30 July 2018 (Water Supply)

Time	Topic	Description	Presenter	Institution
08:00	1	Introduction to IUWM – and the course	Neil Armitage	UCT
09:30	2	Water Sensitive Design (WSD)	Neil Armitage	UCT
11:00		TEA		
11:15	3	Planning for water in the City of Cape Town	Annelise de Bruin	CCT
12:45		LUNCH		
13:45	4	Water Demand Management	Collin Mubadiro & Linda Siyengo	CCT
15:15		TEA		
15:30	5	Water Governance	Gina Ziervogel	UCT
17:00		Formal end of proceedings for the day		

Tuesday, 31 July 2018 (Sanitation)

Time	Topic	Description	Presenter	Institution
08:00	6	Water and socio-cultural relations	Nikiwe Solomon, Germaine Owen & Amber Abrams	UCT
09:30	7	Sanitation	Neil Armitage & Bernelle Verster	UCT
11:00		TEA		
11:15	8	Alternative treatment systems; resource recovery	Dyllon Randall & Bernelle Verster	UCT
12:45		LUNCH		
13:45	9	Public Health considerations	Jo Barnes	SU
15:15		TEA		
15:30	10	Servicing the informal settlements of Cape Town	Densil Faure	CCT
17:00		Formal end of proceedings for the day		

Lecture Programme (cont)

Wednesday, 1 August 2018 (Drainage, Groundwater, Green Buildings; and CoP)

Time	Topic	Description	Presenter	Institution
08:00	11	Sustainable Drainage Systems (SuDS) & Catchment Litter Management	Neil Armitage	UCT
09:30	12	Restoration work on urban rivers	Jason Mingo	WCPG
11:00		TEA		
11:15	13	The role of groundwater in IUWM	Rui Hugman	Umvoto
12:45		LUNCH		
13:45	14	'Green' Buildings	Tom Sanya	UCT
15:15		TEA		
15:30	15	Building a 'Community of Practice'	Kirsty Carden	UCT
17:00		Formal end of proceedings for the day		

Course Overview

Name	Integrated Urban Water Management	
Dates	30 July to 1 August 2018	
Venue	Garnet Room, New Engineering Building, upper campus, UCT	
CPD	3 CPD points, ECSA Validation No: UCTUIDMIUWM1818	
Participants	This course is aimed at all professionals (consultants, managers, councillors) who have an interest in urban water management.	
Fees	Standard delegate: R7500	Daily fee: R2500

Registration

Registration and Cancellation

- [Register for this course](#)
- Registration covers attendance of all sessions of the course, refreshments, and course material.
- Registrations close one week before the start of the course. Confirmation of acceptance will be sent on receipt of a registration form.
- Cancellations must be received one week before the start of a course, or the full course fee will be charged.
- **For more information on application and registration procedures, please visit our website: www.cpd.uct.ac.za**

Certificates and CPD Points

A certificate of attendance will be awarded to CPD participants. Participants need to attend 80% of the lectures to qualify for an attendance certificate. A certificate of successful course completion will be issued to those participants who attend the course and obtain a minimum of 50% in the optional examination or assignment.

CPD participants can also request a formal university transcript, which will show this course as part of a Professional Development Career.

Contact details

For more information or details on CPD courses, visit our website or contact us.

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