

SHORT COURSE: RIVER & STORMWATER HYDRAULICS

DEPARTMENT OF CIVIL ENGINEERING • 9 - 11 September 2026

COURSE COORDINATOR

Dr Adèle Bosman:

Stellenbosch University

Prof Neil Armitage:

University of Cape Town

Visiting lecturers

FEES

3-day course

R9,000

ECSA CPD POINTS

3 points

Only digital certificates will be issued

LANGUAGE

The course will be presented in English.

CONTACT

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OBJECTIVES

This 3-day course on River and Stormwater Hydraulics has been structured to give state-of-the-art theory and practise on stormwater modelling, river hydraulics, and design of stormwater hydraulic structures such as canals, culverts, causeways, bridges, and riverbank protection. Presenters are drawn from government, university, consulting engineering companies and industry. The course includes a tutorial session on the design of SuDS systems. The keynote address, Purpose of Stormwater Management, will be delivered by Prof Neil Armitage. This popular course was last presented in 2024.

OUTCOMES

The course aims to provide participants with the knowledge base and competencies to plan, design, operate and manage river infrastructure.

COURSE ARRANGEMENTS

This course will be presented in-person only at Stellenbosch University. No online option available. Further details will be forwarded to registered delegates once payment has been received..

[CLICK HERE TO REGISTER](#)

REGISTRATIONS

Registrations close:

21 August 2026

All payments are due by:

30 August 2026

Payment confirms registration.



RIVER & STORMWATER HYDRAULICS SHORT COURSE 9 TO 11 SEPTEMBER 2026

Final Program

Design, Management and Maintenance of River & Stormwater

Start Time	Duration	Description	Presenter(s)	Organisation	Lectura
9 September 2026					
DAY 1: Wednesday - Stormwater					
8:15 to 8:30	15	Registration			
8:30 to 8:40	10	Welcome	Prof Adèle Bosman	Stellenbosch University	
8:40 to 9:40	60	Purpose of Stormwater Management	Prof Neil Armitage	University of Cape Town	1
09:40 to 10:30	50	Environmental considerations	Jane Eagle	City of Johannesburg	2
10:30 to 11:00	30	Breakout room and tea break			
11:00 to 12:50	50	Introduction to Sustainable Drainage Systems (SuDS)	Prof Neil Armitage	University of Cape Town	3
12:50 to 12:20	30	Case study: Environmental aspects: What happens if stormwater goes wrong?	Dr Liz Day	Liz Day Consulting	4
12:20 to 13:00	40	SuDS Case Studies	Prof Neil Armitage	University of Cape Town	5
13:00 to 14:00	60	Breakout room and lunch break			
14:00 to 15:00	60	Integrated Stormwater Management and SuDS Implementation in Catchments	Geoff Tooley	Tooley Solutions	6
15:00 to 15:45	45	Catchment, Stormwater & River management in Cape Town	Andrew McDonald	City of Cape Town	7
15:45 to 16:30	45	Rehabilitation of urban streams	Dr Liz Day	Liz Day Consulting	8
16:30 to 18:00	60	Cocktail			
10 September 2026					
DAY 2: Thursday - Hydraulics					
8:15 to 8:30	15	Registration			
8:30 to 9:15	45	Incorporating climate change into urban stormwater and flooding risk management and design	Dr James Cullis	Zutari	12
9:15 to 9:45	30	Case Study: Flood risk reduction in Paarl and Mbombela	Martin Kleynhans	ARUP	13
9:45 to 10:30	45	Culvert Hydraulics, energy dissipation and erosion protection	Prof Adèle Bosman	Univ Stellenbosch	14
10:30 to 11:00	30	Breakout room and tea break			
11:00 to 11:45	45	Flow monitoring techniques	Chris Lloyd	Department of Water & Sanitation	9
11:45 to 12:15	30	Remote sensing	Dr John Okedi	University of Cape Town	10
12:15 to 13:00	45	Stormwater canal design	Prof Adèle Bosman	Stellenbosch University	11
13:00 to 14:00	60	Breakout room and lunch break			
14:00 to 14:45	45	Riverbank protection by groynes	Hans King	Hans King SRS	15
14:45 to 15:15	30	Permeable groynes	Inge Smit	Univ Stellenbosch	16
15:15 to 16:00	45	Case Study: Managing Urban Flood Risk - La Cotte River Flood Assessment	Xanthe Adams and Megan de Jongh	AECOM	17
11 September 2026					
DAY 3: Friday - Management and SuDS Design					
8:15 to 8:30	15	Registration			
8:30 to 9:15	45	Legislation of Stormwater Management	Geoff Tooley	Tooley Solutions	18
9:15 to 10:00	45	Maintenance of urban stormwater structures and rivers	Geoff Tooley	Tooley Solutions	19
10:00 to 10:30	30	SuDS Conceptual designs	Prof Neil Armitage	University of Cape Town	20
10:30 to 11:00	30	Breakout room and tea break			
11:00 to 11:30	30	Introduction to SuDS tutorial and explanation	Prof Neil Armitage	University of Cape Town	21
11:30 to 12:00	30	Tutorial #1 - Demarcation of sub-catchments and flow paths (group work)	Prof Neil Armitage	University of Cape Town	22
12:00 to 12:30	30	Tutorial #1 - Presentations and discussion	Prof Neil Armitage	University of Cape Town	23
12:30 to 13:00	30	Tutorial #2 - Selection of preliminary control measures (group work)	Prof Neil Armitage	University of Cape Town	24
13:00 to 14:00	60	Breakout room and lunch break			
14:00 to 14:30	30	Tutorial #2 - Presentations and discussions	Prof Neil Armitage	University of Cape Town	25
14:30 to 15:00	30	Water Quality Volume (WQV) estimation	Prof Neil Armitage	University of Cape Town	26
15:00 to 15:30	30	Tutorial #3 - Estimation of the impact of the 50-year RI storm (groupwork)	Prof Neil Armitage	University of Cape Town	27
15:30 to 16:10	40	Tutorial #3 - Presentations, discussion, and concluding remarks	Prof Neil Armitage	University of Cape Town	28
16:10 to 16:30	20	Closure	Prof Adèle Bosman	Stellenbosch University	