

Registration Form

New Zealand Practice in Flood Estimation

How to enrol

Online: www.cce.auckland.ac.nz/floodestimation

By phone: +64 9 373 7599 ext 85819

Delegate Details

Full Name	
Postal Address	
Suburb	
City	Post Code
Telephone (day)	
Email	

The Privacy Act

To keep you informed we will hold your name and address on file.
Please tick the box if you do not wish to receive further information

Payment Details

Invoice

Credit Card

Please charge my Visa Mastercard

No																				
Expiry date																3-Digit CSV				
Name as appears on card																Amount \$NZ				
Signature																				

Course Fees

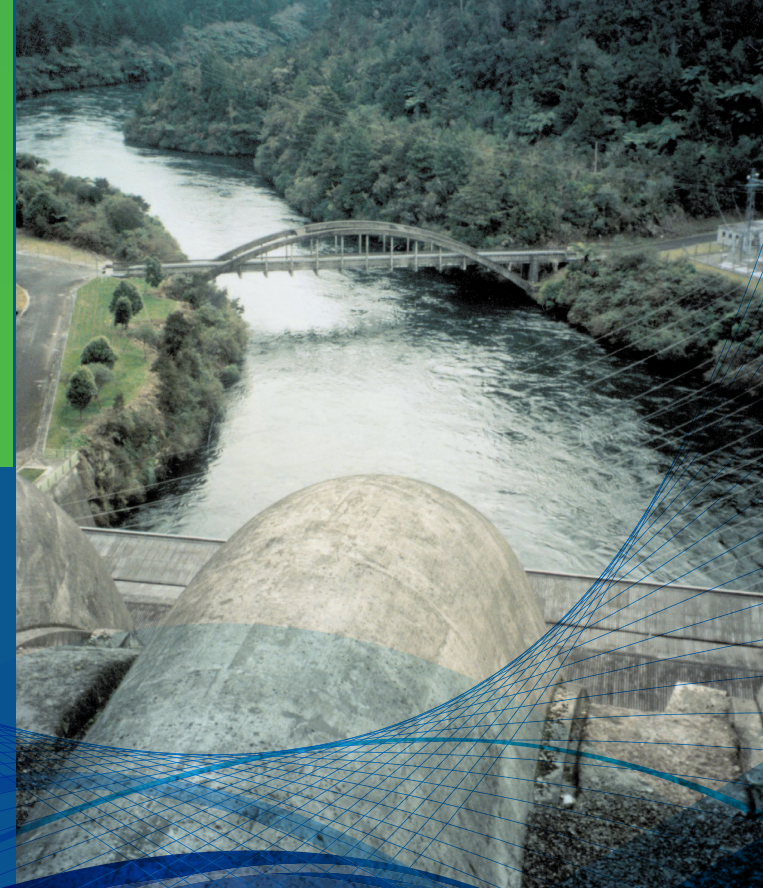
For the full two day course, the registration fee will be \$1,755 + GST until 7 August 2015, and \$1,865 + GST from 8 August 2015. This will include all materials including the course text, computer workshop facilities, lunches, morning and afternoon teas.

A 20% cancellation fee will be levied up to 31 August 2015.

Thereafter no refunds will be made. Course participants can be substituted.

Student discounts may be negotiable on enquiry.

Upon enrolment, details will be supplied about the training venue, parking and dining. Hotel accommodation can be arranged etc.



New Zealand Practice in Flood Estimation

Short Course | The University of Auckland
10 -11 September 2015

Why this course?

New Zealand practice in flood estimation is set out in a number of codes and standards, many of which refer to overseas standards, in particular those used in Australia. Since the demise of the Ministry of Works and Development, oversight of this interlocking network of standard practice has largely been decentralised to Regional and Territorial Authorities. Their position has been complicated by the advent of proprietary software packages, which claim to offer standard solutions but sometimes give significantly different answers. New technology such as rain radar and Lidar terrain survey adds another dimension.

This short course provides an overview of existing flood estimation standards, with a critical examination of areas where these still apply, and where they fall short in the light of modern advances.

Who should attend?

- Professionals actively involved in flood estimation, or supervising or training others to undertake design
- Staff of public agencies or consultants wishing to review flood modelling reports, to evaluate new flood management techniques or broaden existing experience
- Potential or current users of computational hydraulic design packages
- Researchers in flood estimation

Cover photo: Looking over the penstocks of the Maraetai II powerhouse on the Waikato River.

Presenters

Dr Asaad Shamseldin

Civil and Environmental Engineering,
University of Auckland

Asaad Shamseldin has published over 180 publications (journal papers, books, chapters in books and conference papers). His expertise includes catchment modelling, hydroinformatics, environmental change and urban water systems. He is an editor for the Journal of Hydrology and Earth System Sciences and a member of the Editorial Board for the Open Hydrology Journal. He is a Fellow of the Higher Education Academy, UK.

Dr Alastair Barnett

Director, HYDRA Software Ltd

Alastair Barnett has over forty years of experience of computational studies of water flows in proposed or existing engineering projects in twenty countries. As well as undertaking numerical model studies in harbours, hydropower channels, and drainage networks, he has set up many field monitoring programmes for model calibrations and verification. His research on computational hydraulics has attracted international recognition, as he has served as specialist reviewer for many technical conferences. He also peer reviews papers for research journals.

In New Zealand his paper on tsunami studies for the Museum of New Zealand won the 1998 Fulton Downer Gold Medal, the highest technical award of the Institution of Professional Engineers (IPENZ). He also twice won the Brian Brown Award for best water-related paper at IPENZ Conferences. In 2002 his work on AULOS won the Information Technology & Networks Category of the IPENZ Technical Awards, and he was made a Fellow of IPENZ for his contribution to the advancement of engineering knowledge in the field of hydraulic modelling of water flows. He co-presented the 2005 Pickering Lecture series on tsunami hazards, and in 2013 he won the Arch Campbell Award for advancement of knowledge in river engineering.

Course structure

Computer-based workshop sessions will be interwoven with lectures so that participants obtain hands-on experience of application of the methods described. At these workshops, a choice of New Zealand examples will be provided, and made available for closer study during and after the Short Course.

The main workshop flood modelling software will be AULOS - see www.aulohydraulics.com. The cost of copies of this and all other software required to complete workshop exercises will be included in the course fee.

The Course will deal with topics including:

- Reassessment of civil works as flood estimates are revised for climate change and tsunami hazards
- Finding the best flood estimation strategy for the problem
- Practice in Rainfall-Runoff Modelling
- New Zealand flood profiling standards and tests for compliance
- Urban flood modelling, from drains to rivers
- Roughness calibration techniques, including vegetative roughness
- Real-Time river flow forecasting
- Surge modelling, including power canal surges, dambreak waves and tsunamis
- Continuous simulations of long flow series to allow for multi-year storage effects