

## Lifelong Learning at CSCE's 2017 Annual Conference

May 31, 2017

**THE WESTIN BAYSHORE VANCOUVER** - The Chairman Room  
1601 Bayshore Dr.  
Vancouver, BC V6G 2V4  
604-682-3377

To register for this course only: <https://secure.csce.ca/product/hec-ras2017/>

# HEC-RAS V.5 Modelling Including Advanced Applications

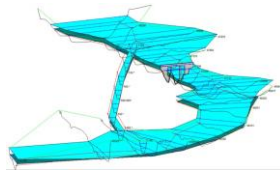
## The Content

The course covers the basic theoretical background of one-dimensional hydraulic modelling, model calibration, bridges and weirs, flood flow simulation and inundation mapping, flow separation, simulation of unsteady flow and an introduction to two-dimensional modelling. The participants will have the opportunity to practice using HEC-RAS on their own computers during the course based on exercises that cover each topic. An emphasis will be given on conveying general modelling principles including field data collection, quality control, purpose of hydraulic modelling and discussing the limitations of one- and two-dimensional hydraulic modelling in general and HEC-RAS in particular.

The course is suitable for practitioners that have a basic understanding of river hydraulics and already have basic knowledge of using HEC-RAS.

## The Instructor

**Gaven Tang, M.A.Sc., P.Eng.**, is a Water Resources Engineer with Golder Associates in Calgary. He completed a Masters of Civil Engineering (Hydrotechnical Speciality) in 2012 from UBC. He has been involved in a variety of Water Resources Engineering and River Engineering related projects since joining Golder in 2012, including: 1D, 2D, and 3D hydraulic modelling; inundation mapping and flood hazard studies; flood mitigation design; and dam breach studies. He was part of the team that received a Canadian Consulting Engineering award for work on flood mitigation innovation in Calgary.



## Course Outline

**Introduction**  
**Theoretical Background**  
**Model Calibration**  
**Bridges and Weirs**  
**Flood Simulation and Inundation Mapping**  
**Flow Separation**  
**Unsteady Flow Simulation**  
**Introduction to Two-Dimensional Modelling**  
**Discussion and Summary**

7:30 Registration – 8:00 Start of Session – 10:00 Coffee Break – 12:00 Lunch – 14:30 Coffee Break – 16:00 End of Session

	By May 10, 2017		After May 10, 2017	
CSCE Members	\$450.00 + Tax	= <b>\$472.50</b>	\$500.00 + Tax	= <b>\$525.00</b>
New Members	\$565.00 + Tax	= <b>\$593.25</b>	\$615.00 + Tax	= <b>\$645.75</b>
Non-members	\$550.00 + Tax	= <b>\$577.50</b>	\$600.00 + Tax	= <b>\$630.00</b>
Students	\$100.00 + Tax	= <b>\$105.00</b>	\$100.00 + Tax	= <b>\$105.00</b>

- ▶ **GROUP RATES** (5 and more) are available upon request.
- ▶ **NEWLY ENROLLING MEMBERS** pay a special introductory membership fee of \$95.00 plus tax and obtain a discount

**Cancellation & Substitution** Cancellation requests received more than 14 calendar days before the start of the course will receive a full refund minus a \$75 administration fee. Cancellation requests received within the 14 days prior to the start of the course will be non-refundable. CSCE reserves the right to cancel any course and will, in such event, fully refund all registration fees. Any registrant may substitute another person eligible for the same fee at any time prior to the start of the course.