GOLOVIN
INTELLIGENT MODELLING FRAMEWORK

Surface Water Solutions
www.surfacewater.biz

Learn rainfall-runoff and flood routing

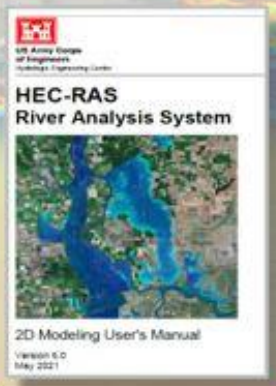
Build, run, and animate 1D and 2D flood models

HEC-HMS

HEC-RAS

Master free software in this intensive, interactive course

Auckland 6-9 March 2022



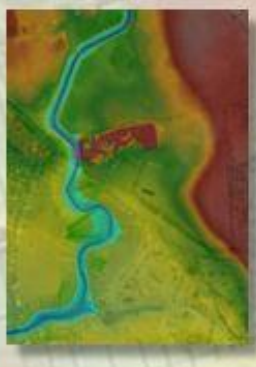
Registration forms below

- Rainfall Runoff
- Hydraulic Structures
- Flood Mapping
- Risk Assessment
- GIS Interfacing
- Output Animations

★ Professional Membership Discounts

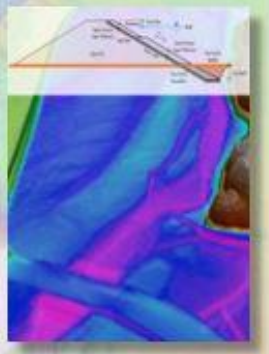
★ Academic and Group Rate Discounts

★ Professional Development Certification



Lead Instructor: Dr. Steven Joynes, Golovin

Steven has over 30 years' experience in rainfall runoff modelling, hydraulic design, and flood mapping. He has conducted HEC-HMS and HEC-RAS training courses in New Zealand since 2011.



Online Instructor: Krey Price, Surface Water Solutions

Krey is a civil engineer with a 20-year, international career focussed on river mechanics and hydraulic modelling. Krey has led over 100 worldwide HEC-RAS training courses.

- Day 1 Monday 6 March: HEC-HMS Essentials
- Day 2 Tuesday 7 March: HEC-HMS Advanced
- Day 3 Wednesday 8 March: HEC-RAS Essentials
- Day 4 Thursday 9 March: HEC-RAS Advanced

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Pricing: $900 per day

Discounts available

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www.surfacewater.biz

Queries: steven@golovin.co.nz

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Attention water resources professionals, regulators, consultants, academics, and practitioners: Save the date for an intensive, interactive course covering the full range of hydrology and hydraulics.

Schedule and pricing:

Day	Course	Daily Price	HEC-HMS or HEC-RAS Price	HEC-HMS and HEC-RAS Price
1	HEC-HMS Part 1	$800	$ 1,400	$ 2,400
2	HEC-HMS Part 2	$800		
3	HEC-RAS Part 1	$800	$ 1,400	
4	HEC-RAS Part 2	$800		

Registration discounts are available for multiple courses, multiple registrants from a single organisation, and members of professional organisations (NZSOLD, NZHS, and Engineering NZ). Previous course attendees can qualify for additional discounts. Details must be provided when requesting a discount.

Please direct pricing enquiries to steven@golovin.co.nz.

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Contents:

DAY 1 Monday 6 March 2022:
HEC-HMS Essentials

- Review of TP108
- Overview of Precipitation-Runoff Processes
- Basin Precipitation
- Rainfall Loss Rates Computation
- Channel Routing
- Multiple catchment and stream modelling
- Basin Model Manager
- Meteorological Model Manager
- Control specifications and time-series data
- Conducting simulation runs

DAY 2 Tuesday 7 March 2022:
HEC-HMS Advanced

- Using GIS tools in HEC-HMS
- Shared component data
- Gridded boundary condition data
- Model calibration
- Using 2D Flow in HEC-HMS
- Working with Depth-Area Analysis
- Working with Optimisation Trials
- Working with Time Series Results
- Exporting results for use in HEC-RAS
- Creating a basin map

DAY 3 Wednesday 7 March 2022:
HEC-RAS Hydraulics Essentials

- File management with HEC-RAS
- RAS Mapper and GIS interfacing
- Importing terrain files
- Setting up a 1D network
- Entering reach data
- Entering cross sectional data
- Entering roughness data
- Junctions
- Bridges and culverts
- Steady and unsteady flow
- Executing plan files
- Floodplain analysis
- Interpreting and checking results

DAY 4 Thursday 8 March:
HEC-RAS Hydraulics Advanced

- Computational mesh generation
- Creating 2D areas
- Hydrologic boundary conditions
- Time step selection
- Entering unsteady flow data
- Computational options and tolerances
- Setting up plan files
- Adding internal structures
- Breaching dams and lateral weirs
- Viewing and exporting in RAS Mapper
- Troubleshooting models
- Calibrating models
- Building your own model from scratch

All course days run from 9.00 am to 4:30 pm

Certification of professional development hours available to all attendees

Location:

Quality Hotel Parnell
10/20 Gladstone Road
Parnell, Auckland 1052
+64 20 7365 0519

Registration Details

Organisation _____

Postal Address _____

Email contact _____

Dietary requirements _____

Course	Date	Attendees Name	Fee ($)
	Discounts		
	Sub-total		
	GST		
	TOTAL TO PAY		

Method of Payment

[ ] Invoice Me (purchase order or reference required)

Register by email to steven@golovin.co.nz

Terms and Conditions

1. Registration is by 1st in - 1st paid basis.
2. If you cannot attend a course, a substitute participant is welcome.
3. If you withdraw from a course in writing or email more than 20 working days prior to the course, you will receive a full refund less a $50 administration fee.
4. If you withdraw with 10 working days' notice, you will receive a 50% refund.
5. After this, if you do not attend the course there is no refund.
6. If a course is rescheduled or cancelled due to lack of numbers, or any other valid reason, you will be advised 10 working days before the course and your course fee will be refunded in full.
7. Participants are responsible for their own travel/accommodation bookings and no compensation will be made should the course be rescheduled or cancelled.
8. Participants must bring their own laptop. Install HEC-HMS and/or HEC-RAS and test the software prior to attending the course. Download links will be provided to all registrants.

Authorisation Signature

Name _____

Signature _____ Date _____