

2011 Water Modelling Training Courses

For Project Managers and Engineers, Surveyors, Planners



Following the success of the courses held throughout New Zealand in 2010, Golovin is thrilled to provide even more courses in 2011.

This year we are offering three additional courses to improve understanding of the inputs, outputs and reporting of hydraulic models.

If your staff are involved in stormwater consents, water supply or wastewater modelling, rivers and catchments and coastal engineering then consider their attendance at the following courses.

The courses will both jump-start and up-skill experienced graduates and also benefit non-modelling technicians in the water modelling field.

"Project Management for Modelling Contracts" was very beneficial for me. It was methodical, logical and helpful to both modeller and non-modeller alike. I took the concepts back to work and applied them immediately!

Ailsa Willis
Lower Murray Water, Victoria

Courses Available

- Course 1 Project Management for Water Modelling Contracts
- Course 2 Water Modelling for Graduates
- Course 3 Peer Reviewing Water Models - with or without software packages
- Course 4 HEC-HMS - basic model set up, execution and results auditing
- Course 5 HEC-RAS - basic model set up, execution and trouble shooting

Course 4 and 5 will be hands-on training.

This year seats are strictly limited for each course.

Course Details

Course No.1

Project Management for Water Modelling Contracts

This course is aimed at engineers who manage internal or external modellers.

Do you want to know all the key steps to ensure the successful completion of water modelling projects?

Are you concerned that projects are over-time, over-budget and still do not clearly meet your needs or give a clear direction of what to do next?

This course is designed to step through all key elements in procuring and completing projects that require hydraulic models. Elements will include;

- Designing a specification
- Knowing what software tools should be used
- Developing “line-in-the-sand” objectives for consultants to follow
- Determining data requirements
- Understanding what’s achievable with today’s technology
- Creating a Peer Review structure

Who should attend?

Project team leaders
Technical managers
Modelling engineers
Environmental planners

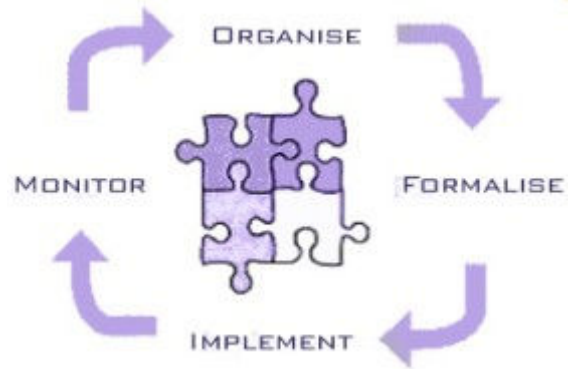
Course No.2

Water Modelling for Graduates

There are no University courses in hydraulic modelling. This course supplements and reinforces on-the-job training. It sets the scene for a step-by-step approach to completing projects.

Elements include;

- Understanding your software needs
- Distilling what the client actually wants
- Structuring your data management



- Building models and designing simulation routines
- Developing a reporting standard that saves time
- Preparing for peer reviews

Who should attend?

Modellers with less than 2 years experience

Engineers who do modelling on a part-time basis but need to keep pace with the industry

Non-modellers who want to understand the processes for when they review work

Course No.3

**NO EXPERIENCE
NECESSARY**

Peer Reviewing Water Models

You do not have to be an expert modeller or a software guru to peer review hydraulic models. You just have to know what to ask for.

Modellers are notorious for producing pages and pages of results that look extensive but are too technical and, worse still, are basically useless to the end objective.

Are you sure that the results quoted in the reports and what actually is in the model match? Based on 20 years experience and the many reviews I have undertaken, surprisingly sometimes they don't.

Golovin has developed methodologies that allow the inexperienced modeller to ask the right questions to ensure that the model results reported do make sense.

This is a course that can give you confidence in the model results and help you communicate with internal or external modellers.

Elements include

- Understanding what outputs software can provide
- What outputs are critical to good modelling practise
- GIGO - Simple tests to ensure the model is behaving itself
- Creating a peer review report in plain English
- Tricks and common mistakes

Who should attend?

Non-modelling staff that have to interpret modellers' reports

Engineers and planners who review resource consents

Graduate modellers who want to ensure their models pass scrutiny

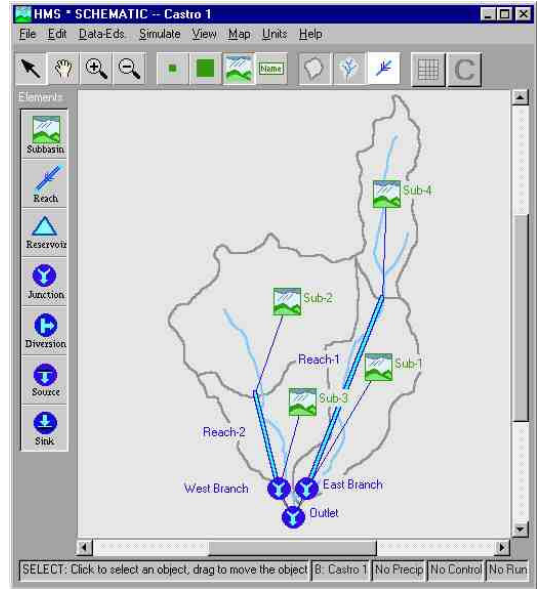
Surveyors who commission 3rd party engineering reports

Course No.4

HEC-HMS - Hydrological Modelling

HEC-HMS is free software that is extensively used throughout New Zealand. Auckland Council developed the TP108 document in 1999 to ensure consistency with the hydrological assessment of developed and undeveloped sites. This course is designed to show how HEC-HMS is used to comply with TP108. For those outside Auckland it is still a methodology that is quicker and more efficient to generate flow and volume hydrographs.

This course will get in-experienced engineers and surveyors up-and-running so they can have confidence in running the software.



Elements include

- Review of TP108
- Overview of Precipitation-Runoff Processes
- Basin Precipitation
- Rainfall Loss Rates Computation
- Transform Concepts
- Channel Routing
- Multiple catchment and stream modelling

Who should attend?

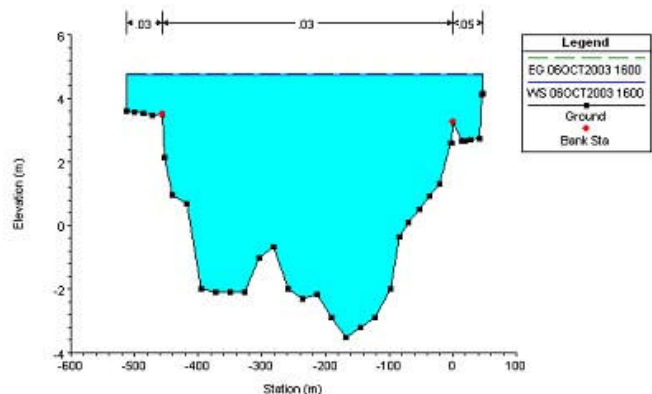
- Graduate engineers
- Graduate hydrologists
- Part-time modellers who want to develop skills using free software
- Survey technician who want to up-skill

Bring your own laptop if you want to practise by yourself

Course No.5

HEC-RAS - Open Channel Modelling

HEC-RAS is free software that is extensively used throughout New Zealand. This course is designed to get in-experienced engineers and surveyors up-and-running so they can have confidence in running the software.



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Elements include

- Strengths and weaknesses of HEC-RAS
- Setting up a network
- Cross-section input
- Floodplain analysis
- Culverts and bridges
- Steady state flow analysis
- Result interpretation and checking

Who should attend?

Graduate engineers

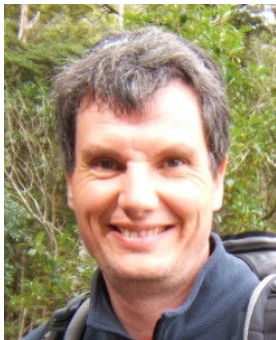
Part-time modellers who want to develop skills using free software

Survey technicians who want to up-skill

Bring your own laptop if you want to practise by yourself.

Each course will satisfy at least 3 core competency standards for IPENZ Continuing Professional Development

Course Leader



Dr Steven Joynes

Steven has 26 years experience in developing, utilising and managing water modelling projects. Starting Hydraulic Modelling Services Ltd in 1992 this company has now serviced over 20 local and regional councils in New Zealand as well as numerous civil engineering and surveying companies.

He was the inaugural chairman of the Modelling Special Interest Group within Water New Zealand for 2 years.

Selling his business in 2005 he has set up Golovin in 2008. This company is dedicated to best-practice methods in water modelling which includes the development of the Modelling Policy Statement, peer review structures and training programmes.

Steven attends numerous conferences and seminars throughout New Zealand and Australia as both a speaker and to keep abreast of new developments.

"Steve's style is hands-on and interactive. You can participate in the course to ensure maximum learning"

Brett Disley
Senior Modeller, Woods, Auckland

Course Locations

To ensure that all practitioners get the opportunity in the provinces the courses will be held in the following locations:

		#1	#2	#3	#4	#5
Location	Month	Modelling Project Management	Modelling for Graduates	Peer Reviewing Models	HEC-HMS	HEC-RAS
<i>Limited Seats</i>		6	8	8	8	8
Auckland	February	21	22	23	24	25
Hamilton	March	21	22	23	24	25
Tauranga	April/May	18	19	20	2	3
Napier	May/June	30	31	1	2	3
Wellington	March	7	8	9	10	11
Christchurch	May	16	17	18	19	20
Queenstown	April	4	5	6	7	8

Investment

1. Project Management for Water Modelling Contracts \$750+GST
2. Water Modelling for Graduates \$625+GST
3. Peer Reviews - for non-modellers \$585+GST
4. HEC-HMS - Hydrological Modelling \$585+GST
5. HEC-RAS - Open Channel Modelling \$585+GST

Course fees include refreshments, lunch and course folder.

Registration Details

Organisation _____

Postal Address _____

Email contact _____

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

Preferred 2nd choice course location (if any) _____

Method of Payment

Invoice Me (purchase order or reference required)

Direct Credit Account Number **BNZ 02-0300-0085050-000**
Use your organisation name as a reference

Register by **email** to courses@golovin.co.nz or **post** to P O Box 5545, Hamilton 3242

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 7 working days prior to the course, you will receive a full refund less a \$50 administration fee.
4. If you withdraw within 7 working days, you will receive a 50% refund.
5. If you do not attend the course and have not advised us in writing there is no refund. However you may transfer to another course for an administration charge of \$100.
6. If a course is rescheduled or cancelled due to lack of numbers, or any other valid reason, you will be advised 7 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.

Authorisation Signature

Name _____

Signature _____ Date _____