

For More Details Please Contact

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How to Register

1. Please complete this form and fax to 03 9010 4328
2. Courier the form with payment to **Lestari Software Enterprise**
Address:

No. 5-2, Jalan Temenggung 5/9, Bdr. Mahkota Cheras, 43200 Cheras, Selangor

Email: syloke@lestarisoftware.com Tel: **03 9010 4368** www.lestarisoftware.com

Registration Form Fax to **03 9010 4328**

Dates: 2, 3 & 4 July 2012 **Cost per Attendee**

Full Payment	By 1st Jun 2012	After 1st Jun 2012
2, 3 & 4 July 2012 (3Day)	RM1,490	RM1,690
2 & 3 July 2012 (2Day)	RM1,390	RM1,530
4 July 2012 (1Day)	RM890	RM1,100

Please tick (/) Please make cheque payable to **Lestari Software Enterprise**

Name: 1) _____ HP: _____

2) _____ HP: _____

3) _____ HP: _____

Company: _____

Address: _____

Tel: _____ Fax: _____

E mail: _____

Cheque no. (Total): _____ Contact Person: _____

Please put any special dietary requirements here _____

Registration fees include professional training, 1 set of workshop notes, CD, certificate and complimentary trial version of xpswmm plus refreshment & lunch. *Computer will be provided to work on the examples during the workshop.*

Please refer to detail workshop program overleaf

About the Workshop

This Workshop will focus on basic and intermediate stormwater & flood modeling, starting with basic hydrology and hydraulics. We will then move into using Malaysian design storms & infiltration from MSMA 2nd Edition to simulate the model. The second day will provide more in-depth instruction and exercise for advanced stormwater hydrology and Low Impact Development (LID) modeling, as well as other more advanced modeling functions such as dual drainage and storage (Pond). The third day will delve into open channel modeling, including integrated 1D/2D urban & river modeling

Who Should Attend?

- Civil engineers who want to advance their modeling skills by applying xpswmm on typical issues such as drain & pond size, surface flooding, outlet structures & size, dual drainage, backwater/tidal boundary conditions, generate flood & hazardous map, etc.
- Authorities & academics involved with stormwater management & mitigation projects.

The Trainer

Tony Kuch, MSc (Eng) has been with XP Software for 16 years and is currently Vice President of North American Operations and Client Services. He has authored several technical papers and has instructed consultants, managers and engineers in well over 100 public workshops and on-site training seminars. Tony graduated from the University of Guelph in Canada, where he completed his Masters of Science in Engineering. His MSc (Eng) thesis was on developing decision support software tools for sensitivity analysis and calibration of SWMM.

During 2007 to 2011, Tony conducted 3 stormwater management seminars in IEM Johor, IEM Kuching & IEM Sabah respectively, 5 public workshops & 3 in-house training cum model assistance in Malaysia.

Stormwater Management & Flood Modeling

2, 3 & 4 July 2012 (Mon – Wed)
9am – 5pm

Level: Basic & Intermediate

Course Outline: The following will be covered over the Three day course.

Note: A 1 hour lunch will be taken at about 13:00pm.

Introduction

- Graphical User Interface
- File management
- Model control and object creation tools
- Layer control and network management
- Model output review tools
- The user will build a simple network using the tools to get familiarity with XP interface.

Flood flow estimation and hydrological modeling

- Creating design storms (MSMA 2nd Edition) for flood flow prediction
- Loss processes and models
- Flood flow estimation using runoff routing
- Multi storm generation and critical storm identification
- Flood forecasting using continuous flow simulation

Hydraulics of flood flow

- Hydraulics system building using digital terrain models (DTM)
- CAD and aerial images
- GIS integration to create flood modeling entities
- Flooding of open channels
- Culvert and road-overtop flows
- Management of flood flows using hydraulic structures including, ponds, outfalls, inlets etc.

Advanced Storm Water Hydrology

- Rainfall Statistics
- Simulation using continuous rainfall data
- Rainfall Import Options
- Global Storms

Modeling Low Impact Development (LID)

- Water Quality Modelling in 1D
- Flow redirection of impervious flow to pervious surfaces
- Modeling rainwater storage tanks, rain gardens, bioretention swales, etc
- Modeling pervious pavement
- Model infiltration trenches and filter strips

Advanced Stormwater Modeling Tools

- Rational hydrology for sizing system
- Tools for determining missing data
- Dual drainage
- Ponding options
- Pond storage and optimization
- Outlet Structures
- Drainage Canals and groundwater

Day 3

River flood management using 1D/2D hydraulic models

- Creating 1D and 2D domains
- Flow boundaries and 1D/2D integration
- Land use patterns
- 1D river floods and 2D overland floods

Urban flood management

- Building urban stormwater network models
- Integration of 1D stormwater network flows and 2D urban flood flows
- Modeling buildings
- Distributed hydrologic modeling using rainfall on 2D grids

Dam break /Levee breach flood management

- Flood levee modeling
- Flood scenario manager with and without flood levee break
- Flood inundation mapping and hazard classification

Q&A (balance of remaining time)