

Agenda

Presented by Mark D. Jones, PE

HEC-HMS Program Overview

Basic Hydrologic Principles

Hydrologic cycle	Rainfall-runoff
Hydrologic modeling methods	Tabular hydrographs
Meteorological data	GIS data
Modeling methodology	

Applications of Hydrologic Models and HEC-HMS

Small scale studies	Stormwater management
Regional flood models	Update earlier modeling

History and Development of the USACOE HEC-HMS Application

HEC-HMS Application User Interface

Program file and project management	
Data entry and editing	GIS data usage
Results and reporting	Mapping capabilities

Small-Scale Watershed Models

Basic data requirements	Model setup
Analysis requirements	Calibration
Results interpretation	

Demonstration of Small Watershed Model

Live demonstration of a small scale HMS model

Large-Scale Watershed Model

Basic data requirements	Model setup
Analysis requirements	Calibration
Results interpretation	Modeling tips

Demonstration of Larger Watershed Model

Live demonstration of a larger scale HMS model
Use of small sub-watersheds
Reach routing

Introduction to HEC-HMS Modeling
Columbia, MD - Friday, December 7, 2018

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Learning Objectives

You'll be able to:

Explore the hydrologic cycle and learn how HEC-HMS models the hydrologic processes of watersheds.

Learn how hydrologic models can be used for regional flood modeling and stormwater management.

Get tips on entering, using and managing data with the HEC-HMS user interface.

Understand the process for small-scale watershed modeling.

View a demonstration of a larger watershed model using small sub-watersheds.



Introduction to HEC-HMS Modeling

Columbia, MD - Friday, December 7, 2018



Understand basic hydrologic principles and meteorological data

Use hydrologic models for regional flood modeling and stormwater management

Explore the HEC-HMS application user interface for data entry, reporting and mapping

Learn about small-scale and large-scale watershed modeling

Continuing Education Credits

Professional Engineers

6.5 PDHs

Floodplain Managers

6.5 ASFPM CECs



HalfMoon Education Inc.
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Faculty

Mark D. Jones, PE
Principal, Hartech Engineering & Consulting, LLC

Hartech Engineering was founded in 2007 as a multi-discipline civil engineering consulting firm providing infrastructure, development and municipal design services for the public and private sectors. The firm is headed by Mark D. Jones, PE, who brings over 25 years of engineering expertise along with specific state-of-the-art, computer-aided technology to achieve efficient, cost saving design solutions. Mr. Jones provides client consultation, project scoping, cost and service agreement documents, along with overall land development budgeting, project invoicing, staff assignment and supervision. He also provides hydrology and hydraulic studies and reports along with general civil engineering support for prime consultants to PennDOT or local municipality projects. Mr. Jones earned his BSCE degree in Military Civil Engineering from the United States Air Force Academy.

Here’s what past attendees had to say about the program and presenter Mark Jones:

“Well presented.” – *Consulting Engineer (Civil)*
“A good overview of the HEC-HMS software.” – *Civil Engineer*
An excellent instructor.” -- *Geologist*

Seminar Information

Sheraton Columbia Town Center Hotel 10207 Wincopin Circle Columbia, MD 21044 (410) 730-3900	Registration 8:00 - 8:30 am Morning Session 8:30 am - 12:00 pm	Lunch (on your own) 12:00 - 1:00 pm Afternoon Session 1:00 - 4:30 pm
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Tuition
\$279 for individual registration
\$259 for three or more simultaneous registrations.
Each registration includes a complimentary continental breakfast and printed seminar manual.
Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar (CDT), and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

Additional Learning

Webinar Series

HEC-RAS Webinar Series

- **Hydraulic Principles and Applications**
Thurs., Oct. 18, 2018, 11:00 AM - 1:00 PM CDT
- **Working with the HEC-RAS User Interface**
Thurs., Oct. 18, 2018, 1:30 - 3:00 PM CDT
- **Water Surface Profiling**
Fri., Oct. 19, 2018, 11:00 AM - 1:00 PM CDT
- **Steady Flow Surface Profile Demonstrations**
Fri., Oct. 19, 2018, 1:30 - 3:30 PM CDT

Geothermal Heating and Cooling

- **Thermodynamic Basics of Geothermal Systems**
Thurs., Nov. 1, 2018, 11:00 AM - 12:00 PM CDT
- **Understanding Earth Loop Systems**
Thurs., Nov. 1, 2018, 12:30 - 2:00 PM CDT
- **Choosing and Designing Geothermal Systems**
Fri., Nov. 2, 2018, 11:00 AM - 12:00 PM CDT
- **Evaluating and Maintaining Geothermal Systems**
Fri., Nov. 2, 2018, 12:30 - 2:30 PM CDT

Construction Cost Estimating

- **Introduction to Cost Estimating**
Thurs., Oct. 25, 2018, 11:00 AM - 12:30 PM CDT
- **Cost Components – A Closer Look at the Estimates**
Thurs., Oct. 25, 2018, 1:00 - 3:00 PM CDT
- **Cost Estimate Organization and Examples**
Fri., Oct. 26, 2018, 11:00 AM - 1:00 PM CDT
- **Cost Estimating Topics**
Fri., Oct. 26, 2018, 1:30 - 3:00 PM CDT

For more information and other online learning opportunities visit:
www.halfmoonseminars.org/webinars/

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 PDHs to professional engineers in all states.

The Maryland Board for Professional Engineers has approved HalfMoon Education as a CPC provider. This is a Category A PE course.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota.

The Association of State Floodplain Managers has approved this event for 6.5 CECs for certified floodplain managers.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Can’t Attend? Order the CD/Manual Package:
An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration

Introduction to HEC-HMS Modeling

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How to Register		Registrant Information	
Online: www.halfmoonseminars.org		Name: _____	
Phone: 715-835-5900		Company/Firm: _____	
		Address: _____	
Fax: 715-835-6066		City: _____ State: _____ Zip _____	
		Occupation: _____	
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		Email: _____	
		Phone: _____	
Complete the entire form. Attach duplicates if necessary.		Name: _____	
		Occupation: _____	
		Email: _____	
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		Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.	
		() I need special accommodations. Please contact me.	

Tuition

() **I will be attending the live seminar.** Single Registrant - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.

() **I am not attending.** Please send me the CD manual package for **\$289.00**. (S&H included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.

Credit Card: *Mastercard, Visa, American Express, or Discover*

Credit Card Number: _____

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