

Agenda

Chad Ballard, MS, PE

Session 1 – Intro into HEC-RAS

Hydraulic principles
Applications of HEC-RAS
1d vs 2d vs 3d

Session 2 – RAS Mapper

Georeferencing and projections
Mapper tools and workflow
Terrain and land cover setup
Session 2 (Workshop)

Session 3 – 2D Modeling

2D modeling theory
Geometry setup
Boundary conditions
Session 3 (Workshop)

Session 4 – Advanced 2D Modeling

2D modeling theory
Model troubleshooting
Rain on grid
Session 4 (Workshop)

Session 5 – 2D Hydraulic Connections

Hydraulics structures
Internal boundary conditions
Session 5 (Workshop)

Session 6 – 1D/2D Modeling with HEC-RAS

Lateral 1D/2D connection
Inline 1D/2D connections
Session 6 (Workshop)

It is strongly encouraged to bring a laptop with you to the seminar. The instructor will demonstrate the software on his computer, and attendees will be able to try working along on their computers. You will receive an email two weeks before the seminar that will contain more information on the hands-on portion of the program.

HEC-RAS 2D Modeling

Rancho Cordova, CA - Thursday, September 13, 2018
San Jose, CA - Friday, September 14, 2018

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Halfmoon Education Inc.
PO Box 278
Altoona, WI 54720-0278



Learning Objectives

You'll be able to:

Explore hydraulic principles.

Learn about applications of HEC-RAS.

Examine mapper tools, terrain and land cover setup.

Study 2D modeling theory, geometry setup and model troubleshooting.

Discuss hydraulics structures and internal boundary conditions.

Explore 1D and 2D modeling with HEC-RAS.



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Explore hydraulic principles

Examine mapper tools, terrain and land cover setup

Study 2D modeling theory, geometry setup and model troubleshooting

Discuss hydraulics structures and internal boundary conditions

Explore 1D and 2D modeling with HEC-RAS

Continuing Education Credits

Professional Engineers

7.0 Continuing Ed. Hours

Floodplain Managers

7.0 ASFPM CECs

Geologists

Non-Credit Continuing Ed.

Landscape Architects

7.0 LA CES HSW PDHs



HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG

Faculty

Chad Ballard, MS, PE *Alan Plummer Associates, Inc., Dallas, TX*
Mr. Ballard is a licensed civil engineer holding bachelor’s and master’s degrees in Civil and Environmental Engineering, and he has experience using a variety of hydrologic and hydrodynamic solvers and modeling platforms. In both an advisory and consulting role, Mr. Ballard has helped hundreds of engineering firms around the world apply different numerical modeling solutions to their specific projects. Currently, he is a consultant and project manager at Alan Plummer Associates as well as a previous adjunct faculty member teaching graduate and undergraduate courses in hydrology and hydraulics. He is a past board member of the local chapter of the Environmental and Water Resources Institute (EWRI), and he is involved with EWRI at the national level as part of the Calibration/Validation of Free-Surface Hydraulic Models Task Committee. Mr. Ballard also has been involved as a previous board member of the professional chapter of Engineers Without Borders (EWB) as well as being involved with other non-profit flood modeling work in developing countries.

Here’s what past attendees had to say about the program and about presenter Chad Ballard:
“Very informative session.” – *Civil Engineer*
“Awesome presentation. Well prepared.” – *Civil Engineer*
“Clear, concise.” – *Civil/Environmental Engineer*

Seminar Information

Thursday, September 13, 2018
Sacramento Marriott Rancho Cordova
11211 Point East Drive
Rancho Cordova, CA 95742
(916) 638-1100

Friday, September 14, 2018
Courtyard San Jose Airport
1727 Technology Drive
San Jose, CA 95110-1310
(408) 441-6111

Tuition
\$279 for individual registration
\$259 for three or more 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, 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

- Community Solar and Rooftop Solar**
- **Community Solar**
Wed., Sept. 5, 2018, 11:00 AM - 2:15 PM CDT
 - **Design Your Solar Roof**
Thurs., Sept. 6, 2018, 11:00 AM - 2:15 PM CDT
- Seismic Design and Construction**
- **Seismology and Building Codes**
Wed., Sept. 12, 2018, 11:00 AM - 3:30 PM CDT
 - **Seismic Design of Building Structures**
Thurs., Sept. 13, 2018, 11:00 AM - 3:30 PM CDT
- Small Wind Energy Systems**
- **Small Wind Energy System Components**
Thurs., Sept. 20, 2018, 11:00 AM - 1:00 PM CDT
 - **Small Wind Energy Siting and Sizing**
Fri., Sept. 21, 2018, 11:00 AM - 1:00 PM CDT
- International Green Construction Code**
- **Introduction to the International Green Construction Code (IgCC)**
Thurs., Sept. 20, 2018, 11:00 AM - 12:30 PM CDT
 - **Chapters 4-5: Site Development and Material Use**
Thurs., Sept. 20, 2018, 1:00 - 2:30 PM CDT
 - **Chapters 6-9: Energy, Water, Environmental Quality and Building Commissioning**
Fri., Sept. 21, 2018, 11:00 AM - 12:30 PM CDT
 - **Chapters 10-11: Existing Buildings**
Fri., Sept. 21, 2018, 1:00 - 2:30 PM CDT
- Slope Stabilization and Landslide Prevention**
- **Analyzing the Stability of Slopes**
Tues., Sept. 25, 2018, 11:00 AM - 2:15 PM CDT
 - **Slope Stabilization Methods**
Thurs., Sept. 27, 2018, 11:00 AM - 2:15 PM CDT

For more information visit:
www.halfmoonseminars.org/webinars/

Continuing Education Credit Information

This seminar is open to the public and offers a continuing education opportunity to California professional engineers, geologists, floodplain managers, and landscape architects. Continuing education is not required for license maintenance or renewal in California. Those seeking continuing education credit in other states will be able to apply the hours earned at this event, in most cases. Refer to specific state rules to determine eligibility.

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 course for 7.0 CECs.

This seminar is approved by the Landscape Architecture Continuing Education System for 7.0 HSW PDHs.

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

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Rancho Cordova, CA - Thursday, September 13, 2018 • San Jose, CA - Friday, September 14, 2018

How to Register	
Online: www.halfmoonseminars.org	
Phone: 715-835-5900	
Fax: 715-835-6066	
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278	
Complete the entire form. Attach duplicates if necessary.	
Name: _____ Company/Firm: _____ Address: _____ City:_____State: _____ Zip:_____	
Occupation: _____ Email: _____ Phone: _____	
Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____	
Name: _____ Occupation: _____ Email: _____ Phone: _____	
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 at the following location:**

() **Rancho Cordova, CA** • Thurs., Sept. 13 () **San Jose, CA** • Fri, Sept. 14

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: _____

Expiration Date: _____ CVV2 Code: _____

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