Agenda

Presented by Eugene Brislin, Jr., P.E.,

Seismology and Earthquake Actions
- Earthquake characteristics
- Effects of soil conditions
- Western, central, and eastern U.S. seismicity

Structural Dynamics and Response
- Ground motions and structural response
- Response spectra
- Damping
- Modal superposition analysis

Modern Philosophy of Seismic Design
- Seismic design objectives
- Inelastic response and ductility
- Proportioning

U.S. Seismic Codes
- History
- Performance objectives
- Hazard levels

ASCE 7 Seismic Design
- Mapped spectral response
- Design response spectrum
- Seismic design category and design factors
- Seismic force resisting systems
- Estimating period
- Structural irregularities
- Equivalent lateral force procedure
- Load combinations, overstrength, redundancy
- Diaphragms and shear walls
- Deflection limitations

Material-Specific Seismic Force Resisting Systems
- International Building Code (IBC) provisions
- American Institute of Steel Construction (AISC 360) provisions
- American Concrete Institute for Structural Concrete (ACI 318) provisions
- American Concrete Institute for Masonry Structures (ACI 530) provisions

Learning Objectives

You’ll be able to:

Describe earthquake characteristics, and consider the effects of soil conditions.

Explain the modern philosophy of seismic design.

Describe the performance objectives of U.S. Seismic Codes.

Understand and comply with the seismic design provisions of ASCE 7.

Identify material-specific seismic provisions in the International Building Code.

Consider guidance from the American Institute of Steel Construction and the American Concrete Institute.

Seismic Design and Construction

Portland, OR - Tuesday, May 5, 2020

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Study seismology, earthquake characteristics, structural dynamics and response spectra

Explore seismic design objectives and U.S. seismic codes

Review seismic design provisions in ASCE 7-10

Examining load combinations, overstrength and redundancy

Review design criteria for wood, steel, concrete and masonry buildings

Continuing Education Credits

Architects
7.0 HSWS CE Hours (CEHs)
7.0 AIA LU|HSW

Professional Engineers
7.0 PDHS

International Code Council
7.0 CEUs - Building

Contractors
7.0 Commercial CE Hours

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Eugene Brislin, Jr., P.E., Structural Engineer, Summerville, SC

Mr. Brislin has been a professional engineer for more than 20 years and has designed many structures and performed many different types of analyses in that time. He has worked for a steel fabricator, an architectural/engineering firm and a seismic consultant and has been in private practice over 15 years.

Mr. Brislin earned his BSCE degree from The Citadel in Charleston, South Carolina, and his MSCE degree from the University of South Carolina. He has completed all his course work for his PhD degree, but has not completed his dissertation. His graduate study work has been in mathematical elasticity.

Mr. Brislin has worked on a wide variety of projects from arenas such as Gund Arena in Cleveland, Ohio, and the Edward Jones Arena in St. Louis, Missouri, to renovation and seismic retrofit of the South Carolina State House and the design of the Columbia South Carolina Museum of Art. He has done stress analysis on weapons systems for the Department of Defense and has consulted on cellular telephone concealment projects.

Mr. Brislin’s company routinely performs modal analysis of structures to provide more accurate seismic loads and to reduce the cost of seismic requirements through more advanced analysis techniques. The company is knowledgeable concerning structural dynamics and can perform a full dynamic analysis for complicated structures, and ductility requirements in concrete and masonry as well as welded steel moment connection requirements on toughness of steel.

Here’s what past attendees had to say about the program and presenter Eugene Brislin Jr.:

“Very good. — Architect

“Did a great job delivering the presentation.” — Structural Engineer

Additional Learning

Webinar Series

Erosion and Sediment Control

Erosion and Sediment Control Requirements and Practices

March 12, 2020, 12:30 - 2:00 PM CDT

• Selection of Erosion Control Practices and Best Practices

March 19, 2020, 12:30 - 2:00 PM CDT

• Small Channels, Control Measure Estimating and Pollution Prevention Plans

March 26, 2020, 12:30 - 2:00 PM CDT

• Stormwater Management Inspection, Maintenance and Case Studies

April 2, 2020, 12:30 - 2:00 PM CDT

Construction Cost Estimating

• Introduction to Cost Estimating

March 19, 2020, 11:00 AM - 12:30 PM CDT

• Assessing the Impact of Sea Level Rise, Changing Temperature and Changing Weather Patterns

March 19, 2020, 1:00 - 3:00 PM CDT

• Cost Estimate Organization and Examples

March 20, 2020, 1:00 - 3:00 PM CDT

• Adapting Sites, Outdoor Spaces, New Construction and Existing Buildings to Withstand Extreme Weather Events

March 20, 2020, 1:30 - 3:00 PM CDT

Introduction to HEC-HMS

• Introduction to Cost Estimating

March 20, 2020, 11:00 AM - 12:30 PM CDT

• HEC-HMS Application User Interface

March 26, 2020, 1:00 - 3:00 PM CDT

• Model Output and Troubleshooting

March 26, 2020, 1:30 - 3:30 PM CDT

• Large Watershed Model and Other Applications

March 27, 2020, 1:00 - 3:00 PM CDT

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

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Registration

Seismic Design and Construction

Portland, OR - Tuesday, May 5, 2020

How to Register

Online:
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Complete the entire form. Attach duplicates if necessary.

Registrant Information

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Tuition

• I will be attending the live seminar. Single Registrant - $299.00. Three or more registrants from the same company registering at the same time - $279.00 each.

• I am not attending. Please send me the self-study package:
  • Downloadable MP3 Audio/PDF Manual for $279.00
  • CD/Manual Package for $299.00
  • USB/Manual Package $299.00

(S&H included. Please allow five weeks from seminar date for delivery)

Seminar Information

Holiday Inn Portland Airport
8439 NE Columbia Blvd
Portland, OR 97220
(503) 256-5000

Registration

8:00 - 8:30 am
Morning Session
8:30 am - 12:30 pm
Lunch (on your own)
12:30 - 1:30 pm
Afternoon Session
1:30 - 5:00 pm

Continuing Education Credit Information

This seminar is open to the public and offers up to 7.0 HSW continuing education hours to architects and 7.0 PDHS to professional engineers in all states. This seminar also offers 7.0 continuing education hours to Oregon commercial contractors. Architects and contractors are not subject to preapproval in Oregon.

This seminar is approved by the American Institute of Architects Continuing Education System for 7.0 LU/HSW (Sponsor No. AIA7180). Visit www.halfmoonseminars.org for complete AIA/CES course information under this seminar listing. Only full attendance is reportable to the AIA/CES.

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The International Code Council has approved this course for .7 CEUs in the specialty area of Building (Preferred Provider No. 1233).

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.

How to Register

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Tuition

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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.

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Refunds will be made if the seminar is cancelled. There will be no refunds if the seminar is postponed or rescheduled.

Additional Learning

Webinars

Introduction to HEC-HMS

Fri., March 20, 2020, 11:00 AM - 1:00 PM CDT

Existing Buildings to Withstand Extreme Weather Events

Fri., March 20, 2020, 1:30 - 3:00 PM CDT

Introduction to Cost Estimating

Thurs., March 26, 2020, 11:00 AM - 12:30 PM CDT

HEC-HMS Application User Interface

Thurs., March 26, 2020, 1:00 - 3:00 PM CDT

Model Output and Troubleshooting

Fri., March 27, 2020, 11:00 AM - 1:00 PM CDT

Large Watershed Model and Other Applications

Fri., March 27, 2020, 1:30 - 3:00 PM CDT

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