

# Agenda

*Presented by Robin M. Closs, S.E., P.E.*

### Understanding Structural Loads

Types of structural loads  
General structural integrity  
Classifying buildings and structures  
Modifying and expanding existing structures

### Dead Loads and Soil Loads

Weight of materials and structure  
Soil loads

### Live Loads

Uniformly-distributed loads  
Concentrated loads  
Required live loads  
Impact loads

### Snow and Ice Loads

Calculating snow and ice loads  
Unbalanced, drifting and sliding loads

### Wind Loads

Wind speed, importance factor, exposure, enclosure  
Allowed procedures  
Basic definitions and requirements  
Main wind force resisting system

### Earthquake Loads

Scope and applicability  
Seismic ground motion values/geotechnical investigation  
Seismic design category  
Design criteria for bearing walls/building frame systems  
Design requirements for non-structural components

### Examples

Application of loads  
Design shortcuts

**Structural Design Loads under the ASCE 7 Standard**  
Syracuse, NY - Friday, June 15, 2018



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Altoona, WI 54720-0278

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## Learning Objectives

### *You'll be able to:*

**Understand** how to determine the weight of materials and seismic design categories.

**Learn** how to implement designs that account for lateral and vertical forces.

**Gain** an appreciation for the depth of structural design knowledge and its application for structural integrity.

**Conduct** snow drift and other live load calculations.

**Apply** what you have learned to the design of existing buildings as well as new buildings.



# Structural Design Loads under the ASCE 7 Standard

*Syracuse, NY - Friday, June 15 2018*



**Explore** different types of structural loads and structural integrity

**Learn** correct use of structural code provisions

**Discuss** application of live loads such as concentrated, uniform, and impact loads

**Understand** how to design for wind and seismic loads

**Review** design shortcuts and application of loads

### Continuing Education Credits

**Professional Engineers**  
7.0 Continuing Ed. Hours

**Architects**  
7.0 HSW Continuing Ed. Hours  
7.0 AIA HSW Learning Units

**International Code Council**  
.7 CEUs (Building)

**Contractors**  
Non-Credit Continuing Ed.



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# Faculty

**Robin M. Closs, S.E., P.E.**  
Robin M. Closs, S.E., P.E., has 15 years of experience as a structural engineer designing and analyzing anything from pipes to multistory buildings in fields such as commercial, power, government, institutional, nuclear, industrial, and residential. She traveled to Long Island in the aftermath of Hurricane Sandy as part of a Code Enforcement Disaster Assistance Response Team. Her engineering knowledge in timber, concrete, steel, masonry, aluminum, and light-gauge metal has helped her design new buildings, complete renovations and additions, demolish existing structures, produce mechanical platforms, and design appropriate repairs to roofs, walls, floors, and spillways. Ms. Closs is a past president of The Engineering Society of Buffalo and currently creates, writes, and edits their monthly newsletter. She also regularly spends time tutoring and greatly enjoys assisting young minds to see the benefits of engineering. She has also acted as the principal coordinator for 80-person volunteer teams, judged inventions, and mentored winners of engineering city competitions. Ms. Closs graduated from the Milwaukee School of Engineering with a BS degree in Architectural Engineering with a Structural Specialty. She is a licensed professional engineer in multiple states, a licensed structural engineer in Illinois, and certified as a NCEES Model Law Structural Engineer. Her goal is to meet client needs in a positive and timely fashion.

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

- “Great presenter. Dynamic and helpful; engaging.”
- “Outstanding seminar...superb teacher!”
- “Good audience participation!”
- “Great energy. Kept the subject matter interesting.”
- “Very informative and entertaining.”

# Seminar Information

**Sheraton Syracuse University Hotel**  
801 University Avenue  
Syracuse, NY 13210  
(315) 475-3000

Registration  
8:00 - 8:30 am  
Morning Session  
8:30 - 11:45 am  
Lunch (on your own)  
11:45 am - 12:45 pm  
Afternoon Session  
12:45 - 5:00 pm

**Continuing Education Credit Information**  

This seminar is open to the public and offers up to 7.0 continuing education hours to professional engineers and 7.0 HSW continuing education hours to architects in all states, excluding Florida architects.

HalfMoon Education is an approved continuing education provider for New York engineers (NYSED Sponsor No. 35).

HalfMoon Education is deemed a New York-approved continuing education provider for architects via its affiliation with the American Institute of Architects.

This event is approved by the American Institute of Architects for 7.0 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES. Courses approved by the AIA qualify for New Jersey architects.

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

The International Code Council has approved this event for .7 CEUs in the specialty area of Building.

This event offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any state with a continuing education requirement for contractors.

- How to Register**
  - Visit us online at [www.halfmoonseminars.org](http://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. You may also send another person to take your place.

**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.

# Additional Learning

- Webinar Series**
- Community Solar and Rooftop Solar**
  - **Community Solar**  
Wed., May 2, 2018, 11:00 AM - 2:15 PM CDT
  - **Design Your Solar Roof**  
Thurs., May 3, 2018, 11:00 AM - 2:15 PM CDT

- Complying with Fire and Building Codes**
- **Introduction to Fire Protection and Life Safety Design**  
Thurs., May 3, 2018, 11:00 AM - 12:30 PM CDT
  - **Occupancy Classifications**  
Thurs., May 3, 2018, 1:00 - 2:30 PM CDT
  - **Means of Egress**  
Fri., May 4,, 2018, 11:00 AM - 1:00 PM CDT
  - **Fire Protection Features and Occupancy Exercises**  
Fri., May 4, 2018, 1:30 PM - 3:30 PM CDT

- Pavement Design**
- **Principles of Pavement Design**  
Thurs., May 10, 2018, 11:00 AM - 12:30 PM CDT
  - **Flexible Pavement Design**  
Thurs., May 10, 2018, 1:00 - 2:30 PM CDT
  - **Rigid Pavement Design**  
Fri., May 11, 2018, 11:00 AM - 12:30 PM CDT
  - **Pavement Drainage and Maintenance**  
Fri., May 11, 2018, 1:00 PM - 2:30 PM CDT

- Foundations in Cold Regions**
- **Introduction to Cold Regions Foundations**  
Thurs., May 17, 2018, 11:00 AM - 12:30 PM CDT
  - **Shallow Foundation Design in Cold Regions**  
Thurs., May 17, 2018, 1:00 - 2:30 PM CDT
  - **Deep Foundation Design in Cold Regions**  
Fri., May 18, 2018, 11:00 AM - 12:30 PM CDT
  - **Foundation Construction in Cold Regions**  
Fri., May 18, 2018, 1:00 - 2:00 PM CDT

- Proposal Writing**
- Tues., May 22, 2018, 11:00 AM - 3:30 PM CDT


- Soil Engineering**
- **Introduction to Soil Engineering**  
Wed., May 30, 2018, 11:00 AM - 12:30 PM CDT
  - **Design of Excavation Support Systems**  
Wed., May 30, 2018, 1:00 - 2:30 PM CDT
  - **Slope Repair Techniques**  
Thurs., May 31, 2018, 11:00 AM - 12:30 PM CDT
  - **Practical Approaches to Foundations and Retaining Structures**  
Thurs., May 31, 2018, 1:00 - 2:30 PM CDT

For more information visit:  
[www.halfmoonseminars.org/webinars/](http://www.halfmoonseminars.org/webinars/)

# Registration

**Structural Design Loads under the ASCE 7 Standard**  
Syracuse, NY - Friday, June 15, 2018

How to Register		Registrant Information
<b>Online:</b> <a href="http://www.halfmoonseminars.org">www.halfmoonseminars.org</a>		Name: _____
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		Address: _____
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		Phone: _____
<b>Phone:</b> 715-835-5900		<b>Additional Registrants:</b>
		Name: _____
		Occupation: _____
		Email: _____
		Phone: _____
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		Occupation: _____
		Email: _____
		Phone: _____
<b>Mail:</b> HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		
<b>Complete the entire form.</b> Attach duplicates if necessary.		
		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.

**Checks:** Make payable to HalfMoon Education Inc.

**Credit Card:** *Mastercard, Visa, American Express, or Discover*  
Credit Card Number: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_ CVV2 Code: \_\_\_\_\_  
Cardholder Name: \_\_\_\_\_  
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