

Credit Information

Residential Structural Design

This webinar offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education hours to architects licensed in all states.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved HalfMoon Education as a sponsor of continuing education (Sponsor No. J885). Course approval is pending. Only full participation is reportable to the AIA/ CES.

The International Code Council has approved this event for .65 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Visit this course listing at www.halfmoonseminars.org for updates on pending credits.

Completion certificates will be awarded to participants who complete this event, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Shallow Foundation Design, Construction and Repair

This webinar offers 7.0 PDHs to professional engineers and 7.0 HSW continuing education hours to architects licensed in all states.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 7.0 LU | HSW (Sponsor No. J885). Only full participation is reportable to the AIA/ CES.

The International Code Council has approved this event for .7 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Completion certificates will be awarded to participants who complete this event, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of each webinar are available for purchase. See course listing online for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit. Self-study packages do not qualify for AIA credit.

Live, Interactive Webinars

- Residential Structural Design
- Shallow Foundation Design, Construction and Repair

NON-PROFIT
U.S. POSTAGE PAID
EAU CLAIRE, WI
PERMIT NO. 2016

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



Live, Interactive Webinars

Residential Structural Design

- Monday, October 25, 2021 | 8:30 am - 4:30 pm CDT

Shallow Foundation Design, Construction and Repair

- Monday, November 1, 2021 | 8:30 am - 5:00 pm CDT

To register, view detailed presenter biographies, and see other learning opportunities, please visit:

www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900



HalfMoon Education Live Webinars



Residential Structural Design

Monday, October 25, 2021 | 8:30 am - 4:30 pm CDT

Credits: Professional Engineers: 6.5 PDHs Architects: 6.5 HSW CE Hours
AIA: Pending International Code Council: .65 CEUs (Building)



Shallow Foundation Design, Construction and Repair

Monday, November 1, 2021 | 8:30 am - 5:00 pm CDT

Credits: Professional Engineers: 7.0 PDHs Architects: 7.0 HSW CE Hours
AIA: 7.0 LU | HSW International Code Council: .7 CEUs (Building)

To register, visit us online at
www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900

AIA
Continuing
Education
Provider



Residential Structural Design

Monday, October 25, 2021 | 8:30 am - 4:30 pm CDT (incl. a 60-min break)

Tuition: \$289 per registrant, \$239 per registrant for three or more

Credits: Professional Engineers: 6.5 PDHs Architects: 6.5 HSW CE Hours
AIA: Pending International Code Council: Pending

Agenda

Understanding Structural Loads

M. Woods

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

Residential Design Loads

M. Woods

- International Residential Code Structural (IRC) structural provisions
- Other standards and guidelines
- Dead loads Live loads
- Combined loads Wind loads
- Ice and snow loads Flood loads

Residential Foundation Design

M. Woods

- Examining site soils and characteristics
- Determining bearing capacity
- Choosing a foundation type: footings, piles, basements, slabs

Frame Design

G. Robinson

- Choosing framing materials Framing floors
- Framing walls Roof framing options
- Connection design

Designing for Wind, Snow, Flood and Seismic Loads

G. Robinson

- Wind resistance design
- Managing snow and ice loads
- Handling flood and wave loads
- Seismic design options

Workshop: Structural Design of a Single-Family Home

G. Robinson

21 USRESSTD 10 25 WEBR JB

To register and to see other learning opportunities, please visit:

www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900

Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of these webinars are available for purchase. Visit these course listings on our website for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit. Self-study packages do not qualify for AIA credit.

Shallow Foundation Design, Construction and Repair

Monday, November 1, 2021 | 8:30 am - 5:00 pm CDT (incl. a 60-min break)

Tuition: \$289 per registrant, \$239 per registrant for three or more

Credits: Professional Engineers: 7.0 PDHs Architects: 7.0 HSW CE Hours
AIA: 7.0 LU | HSW International Code Council: .7 CEUs (Building)

Agenda

Evaluating Building Sites

- Soil mechanics overview Site exploration
- Subsurface exploration Laboratory soil testing
- Design soil profile

Complying with Building Codes and Best Practices

- Building code provisions on shallow foundations
- Special inspection requirements
- Best practices

Shallow Foundation Design

- Using spread footings Using mat foundations
- Using hybrid foundations Using slab foundations

Allowable Settlement and Consolidation

- Determining bearing capacity
- Understanding consolidation and settlement
- Effects of load types and soil types
- Increasing bearing capacity

Shallow Foundation Construction

- Grading and soil improvement
- Dewatering and drainage
- Excavation and underpinning
- Complying with building codes

Basements as Foundations

- Construction of footings, floor and walls
- Drainage considerations
- Walk-outs

Handling Special Considerations in Foundation Design

- Foundations on stratified soils
- Foundations on expansive soils
- Foundations on reinforced soils
- Foundations on slopes

Diagnosing and Repairing Foundation Problems

- Causes of foundation damage
- Repair techniques
 - Ground improvement
 - Underpinning
 - Soil tiebacks
 - Piers, piles

21 USSFDCAR 11 1 WEBR BA

Faculty

Residential Structural Design

Marcus Woods *Owner of Woods Residential Engineering & Inspection*

After working in engineering and design management with award-winning structural and construction firms for nearly 10 years, Marcus E. Woods founded his own firm, Woods Residential Engineering & Inspection. Mr. Woods is a licensed professional engineer in multiple states, holds bachelor's and master's degree in Civil Engineering (with a focus on structures) from Washington University in St. Louis. He has earned "Accredited Professional" status from the U.S. Green Building Council. Mr. Woods is a member of: The Woods Educational Enrichment Foundation, National Society of Black Engineers (NSBE) (Director of Programs for the Chicago professional chapter), the American Society of Civil Engineers, and the Structural Engineers Association of Illinois.

Gregory Robinson, P.E. *Consulting Engineer*

Mr. Robinson is a graduate of North Carolina State University from which he received his bachelor's degree in Civil Engineering and his master of Civil Engineering degree. He has over 30 years of experience in the structural engineering field and has been in private practice for 30 years. Prior to establishing his own practice Mr. Robinson worked for Bechtel Petroleum in San Francisco and for various structural engineering firms in the Raleigh area. Mr. Robinson is a licensed professional engineer in 15 states. He has taught structural analysis classes at the community college level and has conducted numerous seminars over the last 20 years. He also served on a sub-committee for the North Carolina Building Code Council tasked with reviewing the provisions of the North Carolina Residential Code for interior moisture control and water intrusion. Mr. Robinson retired from the United States Navy/Naval Reserve after a 21-year career in the Civil Engineer Corps (Seabees). Mr. Robinson's practice includes design, analysis and evaluation of steel, concrete, masonry and timber structures. He has investigated over 2,000 wood frame buildings for damage, and he has developed plans of repair for structures and finishes.

Shallow Foundation Design, Construction and Repair

Joseph S. Cooke, P.E. *Geotechnical Engineer*

Mr. Cooke's work experience includes services in the geotechnical, construction, construction testing/inspection and environmental engineering fields. His project experience includes projects as large as 1,400 acres, buildings as large as 1.5 million square feet, "portfolio" work on as many as 75 projects in one package, and linear projects as long as 40 miles. His specific specialties include earthwork and soil issues, construction materials and project performance, forensic analysis of geotechnical and materials issues, large project planning and geotechnical-related construction planning and analysis. He has provided geotechnical engineering on over 1,500 projects in over 15 states.

Additional Learning

Designing and Constructing a Net-Zero Energy Home

- Mon, Sept 27, 2021 | 8:30 am - 12:45 pm CDT
- Tues, Sept 28, 2021 | 8:30 am - 1:15 pm CDT

Drones in Construction

- Tues, Sept 28, 2021 | 9:30 am - 5:00 pm CDT

A Roadmap to Ethical Issues in Construction: A Primer for Design Professionals

- Wed, Sept 29, 2021 | 11:00 am - 1:00 pm CDT

International Building Code 2021

- Thurs, Oct 14, 2021 | 8:00 am - 4:00 pm CDT

Advanced Healthy HVAC: Balancing First Cost, Occupant Comfort, and Safety

- Fri, Oct 15, 2021 | 8:30 am - 5:00 pm CDT

AIA Contract Document Workshop

- Mon, Oct 18, 2021 | 8:30 am - 4:30 pm CDT

SketchUp for Building Professionals

- Tues, Oct 19, 2021 | 11:00 am - 2:45 pm CDT
- Wed, Oct 20, 2021 | 11:00 am - 2:45 pm CDT

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