

Agenda

Presented by Dr. Bob Parsons

Soil Investigation and Classification

Properties of soil

- Importance of recognizing soil properties
- Formation of soils
- Types of soils

Soil investigation

- Site reconnaissance
- Geology and visual observations
- Drilling and boring
- Test pits
- Establishing appropriate investigational methods
- Obtaining and reviewing geotechnical reports

Reviewing Hydraulic and Mechanical Properties of Soils

Soil permeability

Compressibility of soil

Soil hydraulics

- Saturation, hydraulic gradient, and conductivity

Drained and undrained shear strength

- Vertical and lateral earth pressure

Stress and failure in soils

Determining and Increasing Bearing Capacity

Calculating bearing capacity

Bearing capacity of shallow foundations

Bearing capacity of piers and piles

Increasing bearing capacity

- Draining and compaction
- Soil improvement

Determining and Increasing Slope Stability

Natural and engineered slopes

Reviewing basic concepts of slope stability

Understanding slope failures

Impact of surface water and groundwater

Examining slope stabilization methods

- Unloading
- Draining and compaction
- Reinforcement
- Soil improvement

Soil Mechanics, Bearing Capacity and Slope Stabilization

Overland Park, KS - Tuesday, July 30, 2019

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

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



Learning Objectives

You'll be able to:

Identify various soil investigation methods and discuss soil laboratory tests.

Obtain and review geotechnical reports.

Explore the hydraulic and mechanical properties of soil.

Calculate bearing capacity for foundations.

Evaluate the stability of natural and engineered slopes.

Discuss slope stabilization methods including drainage and compaction, soil improvement and reinforcement.



Find us on
Facebook

Soil Mechanics, Bearing Capacity and Slope Stabilization

Overland Park, KS - Tuesday, July 30, 2019



Understand the properties of soil and explore soil investigation procedures

Review hydraulic and mechanical properties of soils

Examine the bearing capacity of foundations

Study slope failures and consider the impact of surface and groundwater on slope stability

Examine slope stabilization methods including draining and compaction, reinforcement, and soil improvement

Continuing Education Credits

Professional Engineers

6.5 PDHs

Architects

6.5 Contact Hours (HSW)

6.5 AIA HSW Learning Units

Landscape Architects

6.5 Contact Hours (HSW)

6.5 LA CES HSW PDHs

Contractors

Non-Credit CE Hours



HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG



Faculty

Robert L. Parsons, Ph.D., P.E.
Director of Construction for the School of Engineering Professor, Department of Civil, Environmental, and Architectural Engineering University of Kansas

Dr. Parsons is a professor in the Civil, Environmental, and Architectural Engineering Department at the University of Kansas, where he has been since 1998. In addition to teaching at the graduate and undergraduate levels, Dr. Parsons has an active research program with emphases on soil stabilization, aggregate testing, deep foundations, mechanically-stabilized earth, and railroad ballast characterization and improvement. He is an author of dozens of publications for many research journals, conference proceedings and technical reports. He is the current chair of the Committee on Cementitious Stabilization for the Transportation Research Board (a part of the National Academies of Sciences, Engineering, and Medicine). Dr. Parsons has also served as director of construction for the School of Engineering at KU since 2014, where he represented the School on 80 million dollars of new construction that included two new buildings and renovation of the Engineering Library, in addition to ongoing renovation activities.

Seminar Information

Hilton Garden Inn 5800 College Blvd. Overland Park, KS 66211 (913) 345-2661	Registration 8:00 - 8:30 am Morning Session 8:30 am - 12:15 pm	Lunch (On your own) 12:15 - 1:15 pm Afternoon Session 1:15 - 4:30 pm
---	---	---

Tuition
\$289 for individual registration
\$269 for three or more simultaneous registrations.

Included with your registration:
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 self-study package. You may also send another person to take your place.

Additional Learning

- Webinar Series**
- Low Impact Development (LID)**
- **Introduction to Low Impact Development and Bioretention System Design**
Wed., June 5, 2019, 11:00 AM - 1:00 PM CDT
 - **LID Residential Development and Case Studies**
Thurs., June 6, 2019, 11:00 AM - 1:00 PM CDT

- Fire Protection and Building Codes**
- **Introduction to Fire Protection and Life Safety Design**
Thurs., June 6, 2019, 11:00 AM - 12:30 PM CDT
 - **Occupancy Classifications**
Thurs., June 6, 2019, 1:00 - 2:30 PM CDT
 - **Means of Egress**
Fri., June 7, 2019, 11:00 AM - 1:00 PM CDT
 - **Fire Protection Features and Occupancy Exercises**
Fri., June 7, 2019, 1:30 - 3:30 PM CDT

- Distributed Battery Webinar**
- **The Distributed Battery Webinar, Part I**
Wed., June 12, 2019, 11:00 AM - 2:15 PM CDT
 - **The Distributed Battery Webinar, Part II**
Thurs., June 13, 2019, 11:00 AM - 2:15 PM CDT

- Water Conservation**
- **Evaluating the Owner's Commitment to Water Conservation and Applicable Codes and Standards**
Thurs., June 13, 2019, 11:00 AM - 12:30 PM CDT
 - **Assessing the Building Site**
Thurs., June 13, 2019, 1:00 - 2:00 PM CDT
 - **Conserving and Reducing Water Use**
Fri., June 14, 2019, 11:00 AM - 1:00 PM CDT
 - **Onsite Water Recycling and Minimizing Water Use**
Fri., June 14, 2019, 1:30 - 3:30 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 and 6.5 HSW contact/continuing education hours to architects and landscape architects in most states, including Kansas. Educators and courses are not subject to preapproval in Kansas.

This event is approved by the American Institute of Architects Continuing Education System for 6.5 HSW Learning Units (Sponsor No. J885) and the Landscape Architecture Continuing Education System for 6.5 HSW PDHs. Courses approved by the LACES are deemed approved for Kansas landscape architects. Only full attendance can be reported to the AIA/CES and LA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York architects and landscape architects.

This seminar offers a non-credit continuing education opportunity to construction contractors. It is not approved by any state licensing entity for contractor continuing education credit.

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 Manual and Audio from the Live Seminar as a Self-Study Package!

Audio recordings of this seminar are available for purchase starting at \$269. See registration panel 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.

Registration

Soil Mechanics, Bearing Capacity and Slope Stabilization

Overland Park, KS - Tuesday, July 30, 2019

How to Register	
Online: www.halfmoonseminars.org	
Phone: 715-835-5900	
Fax: 715-835-6066	Code:
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278	
Complete the entire form. Attach duplicates if necessary.	
Registrant Information	
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. Single Registrant - \$289.00 . Three or more registrants from the same company registering at the same time - \$269.00 each.	
() I am not attending. Please send me the self-study package:	
☐ Downloadable MP3 Audio/PDF Manual for \$269.00 .	
☐ 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: <i>Mastercard, Visa, American Express, or Discover</i>	
Credit Card Number: _____	
Expiration Date: _____ CVV2 Code: _____	
Cardholder Name: _____	
Billing Address: _____	
City: _____ State: _____ Zip: _____	
Signature: _____	
Email: _____	