Soil Mechanics, Bearing Capacity and Slope Stabilization

San Antonio, TX - Friday, February 15, 2019

You’ll be able to:
- **Recognize** the properties of soils that impact bearing capacity and slope stability.
- **Learn** about methods of soil investigation, including site reconnaissance, boring and test pits.
- **Understand** soil hydraulics, and discuss drained and undrained shear strength.
- **Get** tips on calculating bearing capacity of soils.
- **Review** soil improvement methods.
- **Increase** slope stability by unloading, draining and reinforcing.

**Learning Objectives**

**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

**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
E. Allen Dunn, III, P.E.  Lead Foundation Engineer, M&I's Engineering LLC

Mr. Dunn is a licensed professional engineer with over 18 years of civil engineering and related experience specializing in geotechnical engineering, pavement engineering, forensic and structural engineering, construction materials engineering and testing, and electrical transmission engineering. His professional experience includes projects throughout Texas, Louisiana, Oklahoma, Arkansas, New Mexico, and Colorado. Mr. Dunn has worked for commercial, governmental, military, and private clients. He earned a B.S. degree in Civil Engineering from Texas A&M University, and an M.S. degree in Civil Engineering and an M.B.A. degree both from the University of Texas at San Antonio.

Additional Learning

Webinar Series

- Commercial Solar Peaker Batteries, Part I
  Wed., Jan. 9, 2019, 11:00 AM - 1:30 PM CST
- Commercial Solar Peaker Batteries, Part II
  Thurs., Jan. 10, 2019, 11:00 AM - 2:15 PM CST

Proposal Writing
Fri., Jan. 11, 2019, 11:00 AM - 5:30 PM CDT

Technical Writing
- Technical Writing Basics
  Mon., Jan. 14, 2019, 11:00 AM - 1:00 PM CST
- Planning Documents
  Mon., Jan. 14, 2019, 1:30 - 3:30 PM CST
- Writing Documents
  Tues., Jan. 15, 2019, 11:00 AM - 1:00 PM CST
- Revising and Editing Documents
  Tues., Jan. 15, 2019, 1:30 - 3:30 PM CST

Fiber-Reinforced Composites
- Portland Cement and Masonry
  Thurs., Jan. 17, 2019, 11:00 AM - 1:00 PM CST
- Fiber-Reinforced Composites
  Thurs., Jan. 17, 2019, 1:30 - 3:30 PM CST
- Fiber-Reinforced Polymer (FRP) Composites Reinforcement
  Fri., Jan. 18, 2019, 11:00 AM - 1:00 PM CST
- Overview of Sandwich Materials and Structures
  Fri., Jan. 18, 2019, 1:30 - 3:30 PM CST

Pumping and Piping Systems
- Introduction to Pumps: Operation, Principles and Calculations
  Thurs., Jan. 24, 2019, 12:00 - 2:00 PM CST
- Design Standards and Codes
  Thurs., Jan. 24, 2019, 2:30 - 3:30 PM CST
- Piping System Components, Materials, and Calculations
  Fri., Jan. 25, 2019, 12:00 - 2:00 PM CST
- Handling Pump and Piping System Problems
  Fri., Jan. 25, 2019, 2:30 - 3:30 PM CST

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

Registration
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Can’t Attend? Order the Manual and the Audio from the Live Seminar as a Self-Study Package! An audio recording of this seminar is available for $289. Allow four 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.