Can't Attend? Order the Seminar as a Self-Study Package! Recordings of this seminar are available for purchase. 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. Self-study packages do not qualify for AIA or LA CES credit.

Choose the way you want to learn! This program will be presented simultaneously live, in-person and live online! Move from in-person to online anytime!

Pavement Design, Construction and Maintenance
Lombard, IL and Online - Wednesday, October 13, 2021

Learning Objectives

You’ll be able to:

Take an in-depth look at both flexible pavement design and rigid pavement design.

Analyze the principles of pavement design.

Explore economics and lifecycle analysis.

Discuss pavement maintenance and rehabilitation.

Learn about other pavement topics including pavement drainage, HMA mix design, and pavements for parking lots/low volume roads.

Agenda

Presented by Michael Ayers, Ph.D., P.E.

Principles of Pavement Design
Goals of pavement design
• Smooth, stable surface and longevity
Terminology and basic components
• Pavement section
• Asphalt and concrete components
• Loading
Consulting guidelines and standards
Collecting data necessary for design
Economics and lifecycle analysis

Flexible Pavement Design
Soil support and subsurface preparation
Reclamation and recycling
Mixture content and pavement thickness

Rigid Pavement Design
Soil support and subsurface preparation
Mixture content and pavement thickness
Joint design

Maintenance and Rehabilitation
Goals
Distresses
Preservation techniques
Rehabilitation practices

Sustainability of Pavements
Carbon footprint analysis
• Treatment
• Raw materials
• Fuel
Environment and LEED credits
• Recycled materials
• Pervious pavements
• Runoff filtration zones

Live, In-Person Seminar and Live Webinar
Pavement Design, Construction and Maintenance
Lombard, IL and Online - Wednesday, October 13, 2021

You’ll be able to:

Understand the goals of pavement design, review terminology and consult guidelines and standards.

Analyze soil support and subsurface preparation, mixture content, and more regarding flexible pavement design.

Examine joint design, soil support and subsurface preparation, mixture content, and more regarding rigid pavement design.

Identify maintenance goals, and consider distresses that may require rehabilitation.

Learn about other pavement topics including pavement drainage, HMA mix design, and pavements for parking lots/low volume roads.

Continuing Education Credits

Professional Engineers
6.5 PDHs

Landscape Architects
6.5 HSW CE Hours

Architects
6.5 HSW CE Hours

LA CES
6.5 HSW PDHs

AIA
6.5 LU|HSW

International Code Council
.65 CEUs (Stiwork)
**Faculty**

Michael Ayers, Ph.D., P.E. President of Global Pavement Consultants, Inc.

Dr. Ayers is the president of Global Pavement Consultants, Inc. (GPC). GPC conducts business worldwide and concentrates primarily on pavement design, construction, evaluation, full-depth reclamation with cement, rehabilitation and concrete overlays. Dr. Ayers specializes in pavement analysis using the AASHTO Mechanistic-Empirical Pavement Design Procedure, forensic analysis, just-in-time training prior to a start-up, troubleshooting both during and after construction and development and delivery of pavement and materials-related seminars and short courses.

Dr. Ayers has extensive experience in the design and construction of concrete overlays, concrete roadways, unbound and stabilized base courses including cement-treated bases, lean concrete bases, full-depth reclamation (FDR) utilizing existing asphalt materials and roller-compacted concrete (RCC). He recently completed development of the Aggregates and Portland Cement Concrete training modules for the Federal Highway Administration (FHWA) Highway Materials Engineering course, the design chapter for the new FDR Guidelines and several chapters in the new FHWA Guide for Concrete Pavement Distress Assessments and Solutions. He also serves as an expert witness on a variety of design and materials-related issues focusing on concrete and RCC pavements. He has substantial experience in field investigations and forensic studies and has conducted numerous large-scale investigations using the MAT SCAN B2 for determining embedded soil location and settlement in concrete pavements. Dr. Ayers has been very active in the industry serving on a variety of National Cooperative Highway Research Program (NCHRP) expert task groups, FHWA projects and university-based research programs. He instructs design and construction courses for the University of Wisconsin, Halfmoon Education, FHWA and others. He is currently working on overseas projects in Belarus, Ukraine, and in Moldova, as well as numerous projects across the U.S.

Prior to founding GPC in January 2011, Dr. Ayers served as a director for the American Concrete Pavement Association (ACPRA), in Roanoke, Illinois. He managed the contractor-based education and training program and provided technical services for ACRA as well as contributing to a variety of projects for both the public and private sectors. He has also served as a university professor at Oklahoma State University, a division manager at ERES Consultants and a group leader at Applied Research Associates, Inc.

**Seminar/Webinar Information**

**Hyatt Place Chicago**
- Lombard/Oak Brook
  - 2340 South Fountain Square Drive
  - Lombard, IL 60148
  - (630) 932-6501

**Registration**
- 8:00 - 8:30 am CDT
- 12:45 - 1:15 pm CDT

**Morning Session**
- 8:30 am - 12:45 pm CDT
- 1:45 - 4:30 pm CDT

**Tuition**
- $289 for individual registration
- $239 for three or more registrants from the same company at the same time.

*Additional Learning*
- $239 for additional learning
- $289 for three or more registrants from the same company at the same time.

**How to Register**
- Visit us online at www.halfmoonevents.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

**Cancellations**
- Transfer from seminar to webinar or from webinar to seminar at any time without charge! Cancellations at least 48 hours before the start of the seminar/webinar, 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/webinar or the self-study package. You may also authorize another person to take your place.

**Continuing Education Credit Information**

This seminar offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education hours to architects in all states. It offers 6.5 HSW continuing education hours to landscape architects licensed in most states.

HalfMoon Education is not seeking landscape architect approval in Florida, New Jersey, or North Carolina. HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 084447), Indiana (License No. CE17000069), Maryland, New Jersey (Approval No. 2490000070), and North Carolina (5-0130).

HalfMoon Education is deemed an approved continuing education sponsor for New York architects, engineers, and landscape architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(c), §69.61(ii), and §71-5.02(c)). Courses approved by the AIACEs qualify for Florida architects. Other states do not preapprove continuing education providers or courses. HalfMoon Education is an approved continuing education provider for the Landscape Architecture Continuing Education System. Attending architects who complete the AIACEs and LA CES. The International Code Council has approved this event for 65 CEUs in the specialty area of Stormwater (Preferred Provider No. 1223).

In-person attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the course. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days. Completion certificates will be mailed to participants who complete this event online, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

**Land Description Systems**
- Tues, Sept 14, 2021 | 11:00 am - 2:15 pm CDT
- Wed, Sept 15, 2021 | 11:00 am - 2:15 pm CDT

**Retaining Wall Design**
- Wed, Sept 15, 2021 | 8:30 am - 5:00 pm CDT

**Deep Excavations**
- Fri, Sept 17, 2021 | 8:30 am - 4:30 pm CDT

**Managing Construction Projects**
- Mon, Sept 20, 2021 | 8:30 am - 4:30 pm CDT

**Stormwater Best Management Practices**
- Mon, Sept 20, 2021 | 8:30 - 5:00 pm CDT

**Landscaping for Pollinators**
- Thurs, Sept 23, 2021 | 10:00 am - 12:00 pm CDT

**A Roadmap to Ethical Issues in Construction: A Primer for Design Professionals**
- Wed, Sept 22, 2021 | 1:45 - 4:30 pm CDT

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

**COVID Health Considerations:**
- In accordance with guidance from the Centers for Disease Control and Prevention (CDC), and depending on COVID transmission rates, those who are fully vaccinated may be able to gather indoors without masks. Those not yet fully vaccinated should continue social distancing and wearing face masks indoors. Please review CDC guidance for recent developments.

**Additional Learning**

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**Registration**

**Pavement Design, Construction and Maintenance**
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**How to Register**

- Online: www.halfmoonevents.org
- Phone: 715-835-9500
- Fax: 715-835-6066

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

Complete the entire form. Attach duplicates if necessary.

**Tuition**

Single Registrant: $289.00. Three or more registrants from the same company registering at the same time - $239.00 each

- ( ) Seminar: I will be attending the presentation, live, in person, in Lombard, IL
- ( ) Seminar: I will be attending the presentation, live, online
- ( ) I am not attending. Please send me the seminar recording:
  - Streamable MP4 Video/PDF Manual for $299.00
  - Flashed USB Edit Manual for $299.00
- Checks: Make payable to HalfMoon Education Inc.
- Credit Card: Mastercard, Visa, American Express, or Discover

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Expiration Date: ________
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