

Agenda

Presented by Artur Daniliants, PE, PTOE

Transportation Planning

Trip generation	Trip distribution
Modal split	Traffic assignment

Traffic Analysis

Traffic flow parameters	Traffic studies
Queuing analysis	Capacity and level of service

Functional Classification of Roadways

Principle arterials	Minor arterials
Major and minor collectors	Urban and rural local roads

Elements of Roadway Geometric Design

Horizontal alignment	Vertical alignment	Site distance
Combination of horizontal and vertical alignments		
Cross-section elements	Superelevation	Intersection geometry

Intersections and Interchanges

Roundabout	Conventional at-grade intersections
DDI and SPUI interchanges	Diamond, directional and cloverleaf interchanges

Signage and Pavement Markings

Classification of signs	Placement of signs	Longitudinal markings
Transverse markings	Raised pavement markers	

Traffic Signal

Types of signalization	Cycle length	Phasing, timing and offset
Signal timing optimization	Accessible pedestrian signals	

Roadway Drainage

Hydrology	Open channel
Surface drainage	Drainage systems: gutters, inlets, pipes
Subsurface drainage	Culverts
Stormwater management facilities	

Roadway Pavement

Flexible pavement	Rigid pavement
Maintenance and rehabilitation	

Pedestrian and Bicycle Facilities

Complete Streets: Design Considerations and Case Studies

Work Zone Traffic Control

Overview of Roadway Design Software

Autodesk Civil 3D	Bentley InRoads
-------------------	-----------------

Future of Highways

Fundamentals of Highway Engineering

Cherry Hill, NJ - Friday, December 7, 2018

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:

Review classification of roadways, including arterials, collectors and locals.

Learn about roadway geometric design, including horizontal and vertical alignment.

Discuss pavements, pavement marking and signage.

Identify types of traffic signalization and understand signal phasing, timing and offset.

Compare roadway design software including Autodesk Civil 3D and Bentley InRoads.



Fundamentals of Highway Engineering

Cherry Hill, NJ - Friday, December 7, 2018



Learn about transportation planning and traffic analysis

Understand the elements of roadway geometric design

Discuss surface and subsurface drainage systems

Explore design of intersections and interchanges

Discuss design considerations for rigid and flexible pavements

Receive an overview of highway design software

Continuing Education Credits

Professional Engineers

6.5 CPC Credits



HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG

Faculty

Artur Daniliants, PE, PTOE is a senior civil/highway design engineer at Arup, a global engineering firm known by its ambitious projects around the world. Expert in all aspects of highway design and traffic engineering, Mr. Daniliants spent most of his carrier working on challenging projects in New York and New Jersey - the nation’s most congested region. Throughout his 25-year professional career, Mr. Daniliants has been involved in a wide range of highway projects including traffic impact studies; design of roadways, intersections, roundabouts and highway interchanges; and design of toll plazas, pedestrian and bicycle facilities, traffic signals, roadway drainage, pavement, and utility relocation. Mr. Daniliants holds a bachelor’s degree in Civil Engineering, and a master’s degree in Traffic Engineering and Transportation Planning. He is a member of American Society of Civil Engineers (ASCE) and The Institute of Transportation Engineers (ITE).

Seminar Information

Holiday Inn Philadelphia - Cherry Hill 2175 West Marlton Pike Cherry Hill, NJ 08002 (856) 663-5300	Registration 8:00 - 8:30 am Morning Session 8:30 am - 12:00 pm	Lunch (On your own) 12:00 - 1:00 pm Afternoon Session 1:00 - 4:30 pm
--	---	---

Tuition

\$279 for individual registration
\$259 for three or more simultaneous registrations.
Included with your registration: Complimentary continental breakfast and printed seminar manual.

- 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 (CDT), 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 CD/manual package. You may also send another person to take your place.

Additional Learning

Webinar Series

Geothermal Heating and Cooling

- **Thermodynamic Basics of Geothermal Systems**
Thurs., Nov. 1, 2018, 11:00 AM - 12:00 PM CDT
- **Understanding Earth Loop Systems**
Thurs., Nov. 1, 2018, 12:30 - 2:00 PM CDT
- **Choosing and Designing Geothermal Systems**
Fri., Nov. 2, 2018, 11:00 AM - 12:00 PM CDT
- **Evaluating and Maintaining Geothermal Systems**
Fri., Nov. 2, 2018, 12:30 - 2:30 PM CDT

Cogeneration System Principles and Practice

- **Understanding the Benefits of Cogeneration**
Thurs., Nov. 8, 2018, 11:00 AM - 12:30 PM CST
- **Laws, Regulations and Building Codes Impacting Cogeneration**
Thurs., Nov. 8, 2018, 1:00 PM - 2:30 PM CST
- **Examining Cogeneration Technologies**
Fri., Nov. 9, 2018, 11:00 AM - 12:30 PM CST
- **Moving to Cogeneration: Analysis, Modeling and Case Studies**
Fri., Nov. 9, 2018, 1:00 - 2:30 PM CST

Shallow Foundation Design and Construction

- **Evaluating Building Sites**
Wed., Nov. 14, 2018, 11:00 AM - 12:30 PM CST
- **Shallow Foundation Design**
Wed., Nov. 14, 2018, 1:00 - 2:30 PM CST
- **Special Considerations in Foundation Design and Construction**
Thurs., Nov. 15, 2018, 11:00 AM - 12:30 PM CST
- **Soil Improvement and Foundation Diagnosis and Repair**
Thurs., Nov. 15, 2018, 1:00 - 2:30 PM CST

Roadway Design

- **Roadway Design**
Thurs., Nov. 29, 2018, 11:00 AM - 12:30 PM CST
- **Roadway Design Process**
Thurs., Nov. 29, 2018, 1:00 - 2:00 PM CST
- **Typical Roadway Sections and Alignment**
Fri., Nov. 30, 2018, 11:00 AM - 1:30 PM CST
- **Intersections, Drainage and Pedestrian-Bicycle Facilities**
Fri., Nov. 30, 2018, 2:00 - 3:30 PM CST

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

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 CPC credits/continuing education hours to professional engineers in all states.

HalfMoon Education is an approved continuing education provider for New Jersey engineers (Approval No. 24GP00000700).

HalfMoon Education is approved by the New York State Education Department as a continuing education provider for engineers (NYSED Sponsor No. 35). This course is eligible for 6.5 continuing education hours/PDHs.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, North Carolina, and North Dakota.

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 CD/Manual Package:

An audio recording of this seminar is available for \$289 (including shipping). Allow five 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.

Registration

Fundamentals of Highway Engineering
Cherry Hill, NJ - Friday, December 7, 2018

How to Register Online: www.halfmoonseminars.org Phone: 715-835-5900 Fax: 715-835-6066 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 - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.

() **I am not attending.** Please send me the 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: *Mastercard, Visa, American Express, or Discover*

Credit Card Number: _____

Expiration Date: _____ CVV2 Code: _____

Cardholder Name: _____

Billing Address: _____

City: _____ State: _____ Zip: _____

Signature: _____

Email: _____

© 2018 HEI #18 NJFWAYD 12 7 CHHL TC