

Agenda

Presented by Dr. Thomas H. Meyer

Development of Global Navigation Satellite System (GNSS) Surveying

- Development of GNSS technology
- Application to surveying
- Benefits and drawbacks

GNSS Fundamentals and Real Time Kinematic (RTK) Methods

- Understanding GNSS science
- Mechanics of GNSS data collection and processing

GNSS Surveying Methods and Best Practices

- GNSS satellites
- Data collection process
- Accuracy versus precision
- Redundancy
- Multipath
- Position dilution of precision (PDOP)

GNSS Surveying Methods and Best Practices

- Root-mean square (RMS)
- Site localizations/calibrations
- Latency
- Signal-to-noise ratio
- Float and fixed solutions
- Elevation mask
- Geoid model
- Understanding errors

Using GNSS Data Successfully

- Applying datum transformations
- Improving field practices
- Using Online Positioning User Service (OPUS)
- Managing data

GNSS Surveying Case Studies

Introduction to GNSS Surveying
White Plains, NY - Friday, June 21, 2019



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

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Learning Objectives

You'll be able to:

Explore the development of GNSS technology and its application to surveying.

Understand the mechanics of GNSS data collection and processing.

Identify GNSS surveying methods and best practices.

Collect, process and **use** GNSS data successfully.

Discuss GNSS surveying case studies.



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Introduction to GNSS Surveying

White Plains, NY - Friday, June 21, 2019



Receive an introduction to the practices and principles of Global Navigation Satellite System (GNSS) surveying

Learn GNSS fundamentals and real time kinematic (RTK) methods

Explore GNSS surveying methods and best practices

Understand how to use GNSS data successfully

Discuss GNSS surveying case studies

Continuing Education Credits

**Professional Engineers
& Land Surveyors**

6.5 Continuing Ed. Hours



HalfMoon Education Inc.
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Faculty

Dr. Thomas H. Meyer *University of Connecticut*

Dr. Meyer is a professor in the Department of Natural Resources and the Environment at UConn's College of Agriculture, Health and Natural Resources (CAHNR). He is a member of the American Society of Civil Engineers and the American Society for Photogrammetry and Remote Sensing, and he is a fellow and past president (2016) of the American Association for Geodetic Surveying. Dr. Meyer is a past president (2006-2007) of the Geomatics Society of New England (previously known as the New England Section ACSM) and a member of the editorial boards of the *Journal of Surveying Engineering and Surveying and Land Information Science*. Dr. Meyer earned his Ph.D. degree from Texas A&M University (College Station, 1998) where he was a research associate in the Mapping Sciences Laboratory. He was named a UConn Teaching Fellow (2015), and he has taught geomatics courses at the graduate and undergraduate levels in geodesy, geographic information science, digital terrain modeling, spatial statistics, and global navigation satellite system surveying. Dr. Meyer has authored an undergraduate-level geodesy textbook and numerous peer-reviewed papers about surveying and mapping, and he teaches professional education seminars for surveyors throughout New England and the United States.

Seminar Information

Crowne Plaza White Plains
66 Hale Avenue
White Plains, NY 10601
(914) 682-0050

Registration	Lunch (On your own)
8:00 - 8:30 am	11:45 am - 12:45 pm
Morning Session	Afternoon Session
8:30 - 11:45 am	12:45 - 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.

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. You may also send another person to take your place.

Additional Learning

Webinar Series

Erosion and Sediment Control

- **Soils and Causes of Erosion**
Thurs., May 16, 2019, 11:00 AM - 12:00 PM CDT
- **Goals for Selection of Erosion and Sediment Control Practices**
Thurs., May 16, 2019, 12:30 - 1:30 PM CDT
- **Calculations for Determining Soil Loss and Channel Stabilization**
Fri., May 17, 2019, 11:00 AM - 12:00 PM CDT
- **Non-Structural Erosion and Sediment Control Best Practices**
Fri., May 17, 2019, 12:30 - 1:30 PM CDT

Construction Cost Estimating

- **Introduction to Cost Estimating**
Thurs., May 23, 2019, 11:00 AM - 12:30 PM CDT
- **Cost Components – A Closer Look at the Estimates**
Thurs., May 23, 2019, 1:00 - 3:00 PM CDT
- **Cost Estimate Organization and Examples**
Fri., May 24, 2019, 11:00 AM - 1:00 PM CDT
- **Cost Estimating Topics**
Fri., May 24, 2019, 1:30 - 3:00 PM CDT

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

Septic Systems Series

- **Onsite Wastewater Treatment Technologies, Regulations and Contaminant Removal**
Tues., May 21, 2019, 11:00 AM - 12:30 PM CDT
- **Evaluating Sites, Setting Treatment Goals and System Design**
Tues., May 21, 2019, 1:00 - 2:30 PM CDT
- **Alternative and Sustainable Treatment Technologies**
Thurs., May 23, 2019, 11:00 AM - 12:30 PM CDT
- **Management Programs for Onsite Wastewater Treatment Systems**
Thurs., May 23, 2019, 1:00 - 2:30 PM CDT

International Residential Code

- **Development and Enforcement of International Residential Code**
Thurs., May 30, 2019, 11:00 AM - 12:00 PM CDT
- **Building Planning and Shell Construction (IRC Chapters 3-10)**
Thurs., May 30, 2019, 12:30 - 2:30 PM CDT
- **Energy Efficiency (IRC Chapter 11)**
Fri., May 31, 2019, 11:00 AM - 12:00 PM CDT
- **Mechanical, Fuel, Plumbing and Electrical Systems**
Fri., May 31, 2019, 12:30 - 2:30 PM CDT

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 continuing education hours to professional engineers in all states. It also offers 6.5 continuing education hours to land surveyors in most states, including New York. HalfMoon Education is an approved continuing education provider in New York for engineers and land surveyors (NYSED Provider No. 35).

HalfMoon Education is an approved continuing education provider for New Jersey professional engineers (Approval No. 24GP00000700). HalfMoon Education has applied to the New Jersey State Board of Professional Engineers and Land Surveyors for course approval for land surveyors, which is pending.

HalfMoon Education is an approved continuing education sponsor for professional land surveyors and engineers in Indiana, Maryland, New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. HalfMoon Education is also an approved education provider for Florida engineers.

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.

Registration

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How to Register		Registrant Information
Online: www.halfmoonseminars.org		Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____
Phone: 715-835-5900		Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____
Fax: 715-835-6066	Code:	Name: _____ Occupation: _____ Email: _____ Phone: _____
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		Name: _____ Occupation: _____ Email: _____ Phone: _____
Complete the entire form. Attach duplicates if necessary.		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.

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: _____