Agenda

Presented by Chris Pucci, PLS

Introduction to GNSS Surveying Day One

Thursday, August 5, 2021 | 10:30 am - 2:30 pm CDT (including a 15-min. break)

Introduction to GNSS

History of GPS GPS vs GNSS

Applications in surveying Benefits and drawbacks

Fundamentals of GNSS

GNSS theory and science GNSS measurements

Overview of methods of GNSS surveying

GNSS Surveying Errors

Accuracy vs precision

Single vs redundant measurements

Error/quality estimates

Error causes

Error mitigation

Coordinate Systems and Units

Meters/feet/US feet/international feet

Geodetic coordinates

Projected coordinates

Local system vs defined system

Q&A/Wrap Up

Introduction to GNSS Surveying Day Two

Friday, August 6, 2021 | 10:30 am - 2:30 pm CDT (including a 15-min. break)

GNSS Surveying Methods & Best Practices

Survey setup

Site calibration vs defined coordinate system

Basic data collection and processing

RTK methods

Static methods

GNSS Surveying Data Management

Data storage/backup/formats

Datum transformations

Time dependency of data

Data processing

GNSS Surveying Case Studies

Static control campaign

RTK control campaign

RTK topography

UAS ground control

Q&A/Wrap Up

GNSS Surveying 5 and Friday, August 6, 2021

Thursday, August

Online

Introduction to

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



Learning Objectives

You'll be able to:

Identify applications of GNSS in surveying and examine benefits and drawbacks.

Examine the causes of GNSS surveying errors and learn mitigation strategies.

Explore coordinate systems and units, including geodetic and projected coordinates.

Understand GNSS surveying methods, including RTK and static methods.

Discuss GNSS surveying data management.



HalfMoon Education Online Learning

Introduction to GNSS Surveying

Live, Interactive Webinar Series Thursday, August 5 and Friday, August 6, 2021



Understand GNSS theory and science

Identify GNSS surveying errors

Explore coordinate systems and units

Discuss GNSS surveying methods and best practices

Review GNSS surveying best practices

Manage GNSS surveying data **Explore** GNSS surveying case

Continuing Education Credits

Professional Engineers7.5 PDHs in Most States

Professional Land Surveyors

7.5 PDHs in Most States

7.5 Florida CE Hours

studies

7.5 Missouri PDUs 7.5 Tennessee PDHs



Faculty

Chris Pucci, PLS is a Project Surveyor for the Oregon Department of Transportation and an adjunct instructor at Chemeketa Community College. He is a graduate of Oregon State University and has been a licensed surveyor in the State of Oregon since 2007. He has worked as a surveyor for two counties, a large city, and the Oregon DOT. His projects have included surveying for planning, project development, right of way, construction, and everything in the middle. He is currently working on groundpenetrating radar for highway projects, technical support for automated machine guidance, advanced survey research, and general survey skills training. He has taught land surveying classes and presented on surveying topics all across Oregon and the United States, both virtually and in-person.

Webinar Information

Day One: Thursday, August 5, 2021

10:30 am - 2:30 pm CDT (including a 15-min. break)

Day Two: Friday, August 6, 2021

10:30 am - 2:30 pm CDT (including a 15-min. break) (please log into the webinar 15 - 30 minutes before start time)

Tuition

\$289 for individual registration

\$199 for three or more registrants from the same company at the same time.

Included with your registration: PDF 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

Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar. For more information, please visit our FAO section of our website, or visit www.gotowebinar.com.

Cancellations: Cancel at least 48 hours before the start of the 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 webinar or the self-study package. You may also authorize another person to take your place.

Additional Learning

Shallow Foundation Design, Construction and Repair

- Tues, July 6, 2021 | 8:30 am - 5:00 pm CDT

Erosion and Sediment Control

- Tues, July 13, 2021 | 8:30 am - 5:00 pm CDT

Retaining Wall Design and Slope Stabilization Techniques

- Tues, July 13, 2021 | 11:00 am 2:15 pm CDT
- Wed, July 14, 2021 J 11:00 am 2:15 pm CDT

Floodplain Mapping, Regulation, and Insurance

- Thurs, July 15, 2021 | 11:00 am 2:15 pm CDT - Fri, July 16, 2021 | 11:00 am - 2:15 pm CDT
- **Universal Residential Design**

- Thurs, July 15, 2021 | 8:30 am - 4:30 pm CDT

The NEW 2021 Minimum Standards for ALTA/NSPS Land Title Surveys

- Mon, July 19, 2021 | 9:00 am - 12:15 pm CDT

Stream Restoration in the Eastern U.S.

- Tues, July 20, 2021 | 7:30 am - 4:00 pm CDT

Deep Excavations

- Wed, July 21, 2021 | 8:30 am - 4:30 pm CDT

Providing Floodplain Services

- Wed, July 21, 2021 | 11:00 am - 2:30 pm CDT

Understanding and Working with Urban Soils

- Fri, July 23, 2021 | 8:30 - 10:30 am CDT

Site Design

- Mon, July 26, 2021 | 8:30 am - 5:00 pm CDT

Reading, Interpreting and **Writing Land Descriptions Workshops**

- Wed, July 28, 2021 | 9:00 am - 4:00 pm CDT

The Arborist Short Course: Advanced Tree Knowledge for Better Tree Care

- Fri, July 30, 2021 | 9:00 am - 4:30 pm CDT

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

Continuing Education Credit Information

This interactive webinar offers 7.5 PDHs/continuing education hours to professional engineers licensed in most states, excluding New York, and 7.5 PDHs to land surveyors licensed in all states except Delaware, New Jersey and New York.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina (S-0130), and North Dakota.

HalfMoon Education is an approved continuing education sponsor for land surveyors licensed in Indiana (License No. CE21700059), Maryland, North Carolina (S-0130), and North Dakota. This program has been approved for 7.5 hours of credit for land surveyors in Missouri, Tennessee and Florida (Provider CE81, course number 9978).

Course completion certificates will be awarded to participants who complete the webinar in its entirety, respond to all the prompts during the instruction, and earn a score of 80% on the guiz that follows the instruction (multiple attempts allowed).

Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of this webinar 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.

Registration

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Introduction to GNSS Surveying

Live, Interactive We

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