# **Credit Information**

#### **Practical Geodesy for Practical Surveyors**

This webinar is open to the public and is designed to qualify for 4.0 PDHs for professional engineers and land surveyors in most states. \*This course is not approved in New York; please refer to specific states rules to determine eligibility. HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider License No. CEA362), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00049300) and North Carolina (S-0130). HalfMoon Education is an approved continuing education sponsor for land surveyors licensed in Indiana (License No. CE10600325), Maryland, and North Carolina (S-0130). This course has been registered with the Florida Board of Professional Surveyors and Mappers for 4.0 CE hours. This course has been approved by the Missouri Board of APEPLSPLA for 4.0 PDUs for land surveyors.

#### Are You Ready for 2025 - New Datums, Coordinates and Heights

This webinar is open to the public and is designed to qualify for 4.0 PDHs for professional engineers and land surveyors in most states. \*This course is not approved in New York; please refer to specific states rules to determine eligibility. HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider License No: CEA362), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00049300) and North Carolina (S-0130). HalfMoon Education is an approved continuing education sponsor for land surveyors licensed in Indiana (License No. CE10600325), Maryland, and North Carolina (S-0130). This course has been registered with the Florida Board of Professional Surveyors and Mappers for 4.0 CE hours. This course has been approved by the Missouri Board of APEPLSPLA for 4.0 PDUs for land surveyors.

#### How to Obtain, Interpret, and Change a FEMA Flood Map

This webinar is open to the public and is designed to qualify for 3.0 PDHs for professional engineers and land surveyors, 3.0 HSW continuing education hours for licensed architects, and 3.0 HSW continuing education hours for landscape architects in all states that allow this learning method. Please refer to specific state rules to determine eligibility. HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider License No: CEA362), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GPOOO493OO) and North Carolina (S-O13O). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers, architects and landscape architects via its registration with the American Institute of Architects Continuing Education System (AIA/CES) and the Landscape Architecture Continuing Education System (LA/CES). Other states do not preapprove continuing education providers or courses. The American Institute of Architects Continuing Education System has approved this course for 3.0 HSW LUs (Sponsor No. J885). Only full participation is reportable to the AIA/CES. The Landscape Architecture Continuing Education System has approved this course for 3.0 HSW PDHs. Only full participation is reportable to the LA CES. HalfMoon Education is an approved continuing education sponsor for land surveyors licensed in Indiana (License No. CE10600325), Maryland, and North Carolina (S-0130). This course has been registered with the Florida Board of Professional Surveyors and Mappers and pre-approved by the Missouri Board of APEPLSPLA for 3.0 PDUs. This Association of State Floodplain Managers has approved this course for 3.0 CECs for floodplain managers.

#### Fundamentals of Geographic Information Systems (GIS) for Engineers and Land Surveyors

This webinar is open to the public and is designed to qualify for 6.0 PDHs for professional engineers and land surveyors in most states that allow this learning method. Please refer to specific state rules to determine eligibility. HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider License No: CEA362), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00049300) and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and land surveyors via its registration with the Practicing Institute of Engineering. HalfMoon Education is an approved continuing education sponsor for land surveyors licensed in Indiana (License No. CE10600325), Maryland, and North Carolina (S-0130). This webinar has been registered with the Florida Board of Professional Surveyors and Mappers for 6.0 CE hours and has been approved by the Missouri Board of APEPLSPLA for 6.0 PDUs for land surveyors. This webinar has been evaluated for compliance with NYS Mandatory Continuing Education requirements for professional engineers and land surveyors by the Practicing Institute of Engineering, and has been approved for 6.0 PDHs.

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

Please see these program listings online to learn about credit for taking these courses on-demand.

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ecember Land Webinars

# **December Land Webinars**

## **Practical Geodesy for Practical Surveyors**

- Wednesday, December 4, 2024 | 8:30 am - 12:50 pm CST

### Are You Ready for 2025 - New Datums, Coordinates and Heights

- Wednesday, December 4, 2024 | 1:00 - 5:20 pm CST

### How to Obtain, Interpret, and Change a FEMA Flood Map

- Thursday, December 12, 2024 | 12:00 - 3:15 pm CST

# Fundamentals of Geographic Information Systems (GIS) for Engineers and Land Surveyors

- Wednesday, December 18, 2024 | 9:30 am - 4:30 pm CST





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# HalfMoon Education Inc., Your LIVE Education Leader Presents

# **December Land Webinars**



# **Practical Geodesy for Practical Surveyors**

Wednesday, December 4, 2024 | 8:30 am - 12:50 pm CST Credits: Engineers: 4.0 PDHs\* | Land Surveyors: 4.0 PDHs\*

# Are You Ready for 2025 -New Datums, Coordinates and Heights

Wednesday, December 4, 2024 | 1:00 - 5:20 pm CST Credits: Engineers: 4.0 PDHs\* | Land Surveyors: 4.0 PDHs\*

# How to Obtain, Interpret, and Change a FEMA Flood Map

Thursday, December 12, 2024 | 12:00 - 3:15 pm CST

Credits: Engineers: 4.0 PDHs\* | Land Surveyors: 4.0 PDHs\* Architects: 3.0 HSW CE Hours | AIA: 3.0 HSW LUs

Landscape Architects: 3.0 HSW CE Hours | LA CES: 3.0 HSW PDHs

Floodplain Managers: 3.0 ASFPM CECs

# Fundamentals of Geographic Information Systems (GIS) for Engineers and Land Surveyors

Wednesday, December 18, 2024 | 9:30 am - 4:30 pm CST Credits: Engineers: 6.0 PDHs | Land Surveyors: 6.0 PDHs

To register, visit us online at

# www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900

\*This course is not approved in New York; please refer to specific states rules to determine eligibility







# **Practical Geodesy for Practical Surveyors**

Wednesday, December 4, 2024 | 8:30 am - 12:50 pm CST

Tuition: \$229 per registrant

Credits: Engineers: 4.0 PDHs\* | Land Surveyors: 4.0 PDHs\*

#### Agenda:

Fundamental Surfaces

Ellipsoid

Geoid and geoid models

Horizontal/Geometric Datums

North American Datum of 1927 (NAD 27)

- North American Datum of 1983 (NAD 83)
- International Terrestrial Reference Frame (ITRF)
- World Geodetic System 1984 (WGS 84) E.

Standard Coordinate System Relationships

- Earth-Centered Earth-Fixed (ECEF)
- Latitude and Longitude
- U.S. State Plane Coordinates
- Universal Transverse Mercator Grid F.

Vertical Datums

- Sea Level Datum of 1929 (MSL 29)
- National Geodetic Vertical Datum of 1929 (NGVD 29)
- North American Vertical Datum of 1988 (NAVD 88)
- U.S. Island Area Vertical Datums

Metadata

24 SWGEODSY 12 4 WEBR LH

# Are You Ready for 2025 -**New Datums, Coordinates and Heights**

Wednesday, December 4, 2024 | 1:00 - 5:20 pm CST

Tuition: \$229 per registrant

Credits: Engineers: 4.0 PDHs\* | Land Surveyors: 4.0 PDHs\*

#### Agenda:

Problems with existing horizontal and vertical datums Advances in spaced-based positioning constellations

New horizontal and vertical datum definitions

Introduction to the International Terrestrial Reference Frame Updated protocols in defining orthometric heights from GNSS

New U.S. State Plane Coordinate systems

Using NGS tools to predict new coordinates and heights

Datum transformations Metadata

24 SWDATMCH 12 4 WEBR LH

#### Can't Attend? Order these Webinars as an On-Demand Packages!

Recordings of these webinars are available for purchase. See details online for more information.

# How to Obtain, Interpret, and Change a FEMA Flood Map

Thursday, December 12, 2024 | 12:00 - 3:15 pm CST

Tuition: \$179 per registrant

Credits: Engineers: 3.0 PDHs | Land Surveyors: 3.0 PDHs Architects: 3.0 HSW CE Hours | AIA: 3.0 HSW LUs

Landscape Architects: 3.0 HSW CE Hours | LA CES: 3.0 HSW PDHs

Floodplain Managers: 3.0 ASFPM CECs

#### Agenda:

Flood Insurance Rate Maps, Flood Insurance Studies, and Letters of Map Change History and types of flood maps

Levels of detail

- Flood zones
- Flood mapping planning and needs

Reading and interpreting flood maps

- Map panel and index information
- Map features

Flood insurance studies

Purpose and contents

Floodway data table

Stream profiles

Obtaining and using flood maps

Map determinations

**Faculty** 

Letters of Map Change

Introduction to and purpose of LOMCs

Learn More and Register:

Customer Service (715) 835-5900 Ext. 1

- - Letters of Map Revision based on Fill
- Letters of Map Amendment Letters of Map Revision

24 SWH2FLDM 12 12 WEBR WL

or scan here

# www.halfmoonseminars.org

Field Maps Continued map demonstrations Wrap Up

Additional references

Agenda:

Introduction

Definitions

Metadata

Usage

Requirements

Autocad/Map

Google Earth

Acronyms

About the author

Sources of GIS Data

Coordinate systems

Coordinate Systems/Projections

Questions and answers

Usage and review of datasets

Online poll discussion

Definitions used in GIS

Projections

GPS validation

Carlson GIS

ArcGIS

24 USFGIS4E 12 18 WEBR LH

## Practical Geodesy for Practical Surveyors and Are You Ready for 2025 -New Datums, Coordinates and Heights

Dave Doyle is the Owner Base 9 Geodetic Consulting Services and has been engaged in geodetic surveying since his enlistment in the U.S. Army in 1967. In 1972 he joined the National Geodetic Survey and held the position of chief geodetic surveyor for twelve years prior to his retirement in January 2013. Mr. Doyle was responsible for the development, technical design and management of plans and programs that enhanced the United States National Spatial Reference System. Mr. Doyle's efforts also included extensive activities to direct and coordinate the modernization of national geodetic reference frames in countries in Africa, Caribbean, Central, and South America, Eastern Europe and the Pacific. He is a past president and Fellow member of the American Association for Geodetic Surveying. has served on the U.S. delegation to the International Federation of Surveyors and is an active member of the District of Columbia, Maryland, and Virginia professional surveyors associations.

# How to Obtain, Interpret, and Change a FEMA Flood Map

William Nechamen CFM. is the principal and owner of Nechamen Consulting, LLC, and was the floodplain coordinator for the State of New York Department of Environmental Conservation for 21 years. During that period, he helped to promote higher floodplain

standards in New York, including enacting a two foot "freeboard" requirement in New York's building code, saving property owners millions of dollars in flood losses and flood insurance premiums.

**Fundamentals of Geographic Information** 

\$237 per attendee for group registrations of two or more people registering

at the same time for the same program. That's a savings of 30 percent!

Systems (GIS) for Engineers and

Wednesday, December 18, 2024 | 9:30 am - 4:30 pm CST

Credits: Engineers: 6.0 PDHs | Land Surveyors: 6.0 PDHs

Sources lists (Local/State/Federal/World)

Coordinate systems and transformations

Various examples of real-world GIS mapping

Software demonstrations (Hands on if available)

Projections – why so many and usage

**Land Surveyors** 

**Tuition:** \$339 per registrant

#### Fundamentals of Geographic Information Systems (GIS) for Engineers and Land Surveyors

Jeffrey Horneman, PLS/GISP, has been working in the survey/geospatial field since joining the U.S. Army Reserves in 1984 as a geodetic surveyor. He attended the Defense Mapping School (now the National Geospatial-Intelligence Agency) in Fort Belvoir for geodetic surveying and received continuing education at the U.S. Army Professional Development Institute, the Community College of the Air Force, and various conferences, acquiring more than 400 continuing education credits in surveying, mapping, geology, GIS, and engineering. Mr. Horneman's experience over the past 40 years includes surface and underground mining surveying, design and permitting, boundary and topographic surveys, ALTA surveys, subdivisions, construction surveying, GIS oversight, oil and gas wells and pipelines, and consulting. He currently works for the U.S. Army Corps of Engineers, Pittsburgh District, as the Deputy Chief of Real Estate/Chief of the Geospatial Branch for cadastral projects and GIS base mapping. Mr. Horneman also manages his own firm, Horneman Surveying, LLC and has been teaching professional classes for the last 15 years in various continuing education venues, including Half Moon Education, PSLS, and WVSPS.

<sup>\*</sup>This course is not approved in New York; please refer to specific states rules to determine eligibility