State Plane Coordinate System Workshop

Natick, MA • Monday, July 14, 2014

This seminar is also being offered in Nanuet, NY (July 11, 2014), and in Portland, ME (July 15, 2014).

Please visit www.halfmoonseminars.com for more information

Presented by Todd W. Horton, PE, PLS

Geodetic Datum Basics
Characteristics and applications
Geocentric and geodetic coordinate systems
WGS84, NAD83, ITRF
Global and regional datums
Continuously Operating Reference Stations (CORS)
NAD83 adjustments: past, present and future

State Plane Coordinate System Basics
Proper application of State Plane Coordinate Systems
Transverse Mercator and Lambert Conformal Conic projections
State statutes and zone definitions
Scale factor, elevation factor, combined factor
Ground-to-grid conversion
Convergence angle
Units: meters, US Survey feet, International feet

Datum Transformations
Basics and concepts
Low distortion projections

Vertical Datums and the Geoid
Ellipsoidal height and SPCS elevation factor
NAVD 88
Proper geoid use

Error Management
Positional quality, precision, confidence
Essential metadata

Online Positioning User Service (OPUS)

Project Planning

Identify how geodetic and plane datums work together
Understand the proper use of state plane coordinates
Troubleshoot coordinate system problems
Understand coordinate quality and confidence levels
Apply the geoid properly

Learn how geodetic and plane datums work together
Understand proper use of state plane coordinates
Learn to troubleshoot coordinate system problems
Understand coordinate quality and confidence levels
Learn how to apply the geoid properly

This seminar offers 7.0 hours of continuing education to Massachusetts professional land surveyors and engineers.
About the Seminar

Monday, July 14, 2014

Courtyard by Marriott Natick (508) 655-6100
342 Speen Street • Natick, MA 01760

$269 for one or $249 each for three or more
from the same company; registering at the same time.
Each registration includes one copy of State Plane Coordinate System Workshop.

Manage the registration table for reduced tuition!
You, someone in your office, or an associate can attend this event for only $101 — just agree to be our on-site coordinator for the day. It's fun and easy, and a great way to earn your continuing education credits. For availability and a job description, go online to www.halfmoonevents.com.

Four Easy Ways to Register Today!
Register online at www.halfmoonevents.com, mail in registration form to HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278, fax the form to (715) 835-6066, or call a customer service representative 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. If you cancel after that time, you may choose to apply a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

Earn continuing education credit!
This seminar is open to the public and offers 7.0 hours of continuing education to professional land surveyors and engineers in most states. Continuing education is not required for license maintenance in Massachusetts.

HalfMoon Education Inc. is an approved continuing education sponsor for professional land surveyors and engineers in Indiana, Louisiana, Maryland, New York (NYS MSC No. 35), North Carolina, and North Dakota. HalfMoon Education is also an approved education provider for Florida and New Jersey (Approval No. 24GP00040700).

Attendance will be monitored and reported, as required. 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.

CD/Manual Package: An audio recording of this seminar is available for $279 (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.

Faculty

Todd Horton, PE, PLS, is an associate professor and the director of the land surveying and construction management degree programs at Parkland College in Champaign, Illinois, where he has taught since 1998. He also teaches surveying to University of Illinois civil engineering students. Beyond the campus, he presents continuing education seminars across the country for land surveyors and engineers.

Mr. Horton has several years of experience in planning, surveying, design, construction, and maintenance of civil engineering projects, including commercial structures, residential subdivisions, airfields, utility systems and highways. His previous employers include the US Air Force, the Illinois Department of Transportation, and engineering and surveying firms in central Illinois.

Mr. Horton is the faculty advisor of the Parkland College Student Chapter of the Illinois Professional Land Surveyors Association. He received his B.S. Civil Engineering degree from the University of Illinois at Urbana-Champaign.

Here's what past attendees say about the program and speaker Todd Horton:

"Very good explanations and examples." — Land Surveyor

"Very knowledgeable. Keeps it interesting." — Engineer/Land Surveyor

"Instructor highly knowledgeable and interactive." — Engineer

"Excellent presentation abilities and subject expertise." — Survey Technician

Register online at: www.halfmoonevents.com