

# GEOGRAPHIC INFORMATION SYSTEMS (GIS) FUNDAMENTALS FOR UTILITIES

September 22-23, 2020  
Online | Central Time

## EUCI ONLINE COURSE

EUCI is pleased to offer this course on our online interactive platform. Enjoy a valuable learning experience with a smaller impact on your time and at reduced cost. You will gain new knowledge, skills, and hands-on experience from the comfort of your remote location.

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*“For anyone beginning with a GIS infrastructure, I would recommend this training to gather a better basic knowledge of what you are working with daily.”*

IT Manager, Twin County EPA



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EUCI is authorized by IACET to offer 1.1 CEUs for the course



This course is approved for GISP points through the GIS Certification Institute

## OVERVIEW

This course introduces Geographic Information Systems (GIS) concepts and related tools used by different industries as part of their business models and workflows. This course will show you how to modify and implement other industries' applications to the electric utility, as well as where to find tools and other resources. You will also learn about development, applications, GPS, remote sensing technologies (such as LiDAR and how to use them to target renewable energy options), integration between systems like SCADA, trends like UAV's which are tightly related to geographic information systems, and even enterprise deployments. We will look in the future as well as evaluate new software versions for tools such as the Utility Network tool and its impact on an electric network. Real world use cases will be part of our interactive discussions.

GIS is becoming a well-known technology that is used every day, not just by all types of organizations all over the world, but also by people. It is used to visualize any type of features, find patterns, analyze change, create models, tell stories, solve and predict problems, and turn raw data into actionable information and decision making. The course is ideal for any professional from any industry who would like to start learning about GIS, but also for the expert that would like to take GIS to the next level or an organization that wants to implement GIS.

## LEARNING OUTCOMES

- Familiarize yourself with GIS fundamentals
- Discuss how to deploy and implement a GIS system for any scale organization
- Discuss real use cases
  - o United Power, XCEL Energy
  - o Distribution vs. transmission
  - o Streetlights repair and maintenance
- Identify new technologies
- Compare the positive and negative factors
- Recognize GIS industries and its applications to the electric utility
- Evaluate data integration and security
- Interpret data collection and management
- Consider data sources and types
- Explore what resources you have available
- Apply GIS in the field usage patterns areas: data management, planning and analysis, field mobility, operational awareness, and stakeholder engagement

## WHO SHOULD ATTEND

- Any professional in any expertise level in the industry who would like to start learning about GIS
- For experts who want to take GIS to the next level
- A professional at a utility who wants their company to implement GIS



*“Diego’s experience with different employers gives a great variety of perspectives.”*

GIS Coordinator, Associated Electric Cooperative

# AGENDA

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TUESDAY, SEPTEMBER 22, 2020 - CENTRAL TIME

**8:45 – 9:00 am**

**Log In**

**9:00 am – 4:30 pm**

**Course Timing**

**12:30 – 1:15 pm**

**Lunch Break**

- Why GIS?
- Introduction and Basic Concepts
  - o Data types
  - o Projections
  - o Data accuracy
  - o Scales
  - o GIS systems architecture and components
  - o Geospatial data modeling
  - o Survey vs. mapping
  - o Cartography
- GIS Applications and Uses as a Tool
  - o Open GIS vs. Product GIS
  - o Geospatial analysis
  - o GPS
  - o Programming vs. scripting
- Aerial Imagery and Remote Sensing
  - o Definition and concepts
  - o Aerial imagery as a base and analysis map
  - o LiDAR applications
  - o Google Maps
  - o Georeferencing
  - o Conversions
- Desktop vs. Web vs. Mobile and Other Platforms
  - o Desktop software
  - o 3rd party vendors
  - o ESRI AGOL & Portal environments
  - o Web app builder, dashboards, analytics, story maps
- GIS in the Electric Utility Industry
  - o Networks and tracing
  - o OMS
  - o Data integration and modeling
- Data Entry, Integration, Collection, Quality, and Maintenance
  - o Asset management
  - o Fleet management
  - o Field inventory
  - o OMS
  - o SCADA
  - o Customer care
  - o AMI
- Data Standardization, Sharing, and Security
  - o Metadata
  - o Data classification
  - o Data models
  - o Data and network security

# AGENDA

WEDNESDAY, SEPTEMBER 23, 2020 - CENTRAL TIME

8:45 – 9:00 am

Log In

9:00 – 12:00 pm

Course Timing

- Enterprise Deployments and Implementations
  - o RDMS
  - o Cost
  - o Staff structure
  - o Internal vs. consultant implementations
  - o Environments (production vs. testing vs. development vs. replication/disaster recovery)
  - o Investor Owned Utilities vs. Coops vs. Municipalities
  - o System migrations
  - o User training and customer engagement
  - o GIS system administration
- Future Trends
  - o UAV
  - o Open GIS
  - o Utility network
  - o Mobile GIS
  - o The internet of things
  - o Crowd sourcing and online resources
  - o GeoEvents
  - o AMI

## COURSE INSTRUCTOR



### Diego Portillo

**Public Works GIS Manager, City of Vancouver, WA**

Diego Portillo is a GIS Professional with over 20 years of experience in the geospatial field related to different industries, from community development, to planning, consulting, water, public works, and electric utilities. His background includes data entry, data management, desktop and web application development, applications and data integration, spatial analysis, project management and enterprise implementations. His accomplishments had been recognized by several industries, including the Special Achievement in GIS at the ESRI International Conference in 2006 for his GIS Enterprise Implementation at United Power (Brighton, CO). Currently he is the Public Works GIS Manager for the City of Vancouver, WA.



*“I thought Diego knew his stuff and presented it in an understandable way, especially for a learner like me!”*

Software Developer, IQGeo

## IACET CREDITS

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EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

**EUCI is authorized by IACET to offer 1.1 CEUs for the course.**

## GISP POINTS

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This course is approved for GISP points through the GIS Certification Institute

## ONLINE COURSE DELIVERY & PARTICIPATION DETAILS

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We will be using Microsoft Teams to facilitate your participation in the upcoming event. You do not need to have an existing Teams account in order to participate in the broadcast – the course will play in your browser and you will have the option of using a microphone to speak with the room and ask questions, or type any questions in via the chat window and our on-site representative will relay your question to the instructor.

- You will need to join the appropriate meeting at the appropriate time.
- You will receive a meeting invitation will include a link to join the meeting.
- Separate meeting invitations will be sent for the morning and afternoon sessions of the course.
  - o You will need to join the appropriate meeting at the appropriate time.
- If you are using a microphone, please ensure that it is muted until such time as you need to ask a question.
- The remote meeting connection will be open approximately 30 minutes before the start of the course. We encourage you to connect as early as possible in case you experience any unforeseen problems.

## REQUIREMENTS FOR SUCCESSFUL COMPLETION

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You must be logged in for the entire presentation and send in the evaluation after the online course is completed.

## INSTRUCTIONAL METHODS

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PowerPoint presentations, interactive group exercise, and group discussion will be used during this course.

## COURSE RECORDING

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A recording of this program will be available for three days from either the end of the program (or three days from the date of purchase, if you purchase the recording after the session ends). It is presented in four-hour sessions and can be watched an unlimited number of times for three days (for the registrant). There is no additional cost beyond the registration fee.

To Register Click Here, or

**Mail Directly To:**

PMA Conference Management  
405 Highview Rd  
Englewood NJ 07631  
201 871 0474  
Fax 253 663 7224  
register@pmaconference.com

# ENERGIZE WEEKLY

Energize Weekly is EUCI's free weekly newsletter, delivered to your inbox every Wednesday. We provide you with the latest industry news as well as in-depth analysis from our own team of experts. Subscribers also receive free downloadable presentations from our past events.

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## PLEASE SELECT

**GEOGRAPHIC INFORMATION SYSTEMS (GIS) FUNDAMENTALS FOR UTILITIES ONLINE COURSE**  
SEPTEMBER 22-23, 2020: US \$1195 (Single Connection)

**PACK OF 5 CONNECTIONS:** US \$5,375

**PACK OF 10 CONNECTIONS:** US \$8,965

### Online Course Delivery & Participation Details

*See page 5 for information*

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name

Job Title

Company

Address

City

State/Province

Zip/Postal Code

Country

Phone

Email

### CREDIT CARD INFORMATION

Name on Card

Billing Address

Account Number

Billing City

Billing State

Exp. Date

Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

Billing Zip Code/Postal Code

**OR** Enclosed is a check for \$ \_\_\_\_\_ to cover \_\_\_\_\_ registrations.

#### Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before August 21, 2020 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices. EUCI reserves the right to alter this program without prior notice.