

Each course is worth 1 American Institute of Architects CEU/HSW and is one hour in length.

Introduction to Drones *(new)*

This course teaches attendees the basics of Drones and UAS-based mapping including history, trends, components, and use cases. It will provide an overview of hardware and software utilized and the steps involved in making a drone mapping project decision.



Sustainable Waterfront Development, Revitalization, and Resiliency *(new)*

Attendees will learn how to identify suitable waterfront design approaches to encourage sustainable development, clean up contaminated waterways and waterfront properties, enhance ecology and wildlife habitats at the shoreline, improve residency during natural disasters, and provide safe public access to our waterways for future generations to enjoy.

Landscape on Structures *(new)*

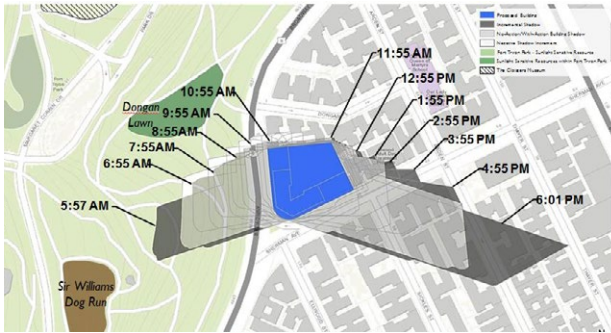
This course provides an overview of various rooftop landscapes, design responsibilities of the landscape architect, design team interaction, and applicable code considerations. Green roof case studies will also be presented.

Only available in NY, NJ, eastern PA, and DC.



Geographic Information System (GIS) for Colleges & Universities *(new)*

This course provides an overview of GIS, and its applications and usage on college campuses. An emphasis on implementation of practical applications to increase operational efficiencies is a main focal point of the presentation.



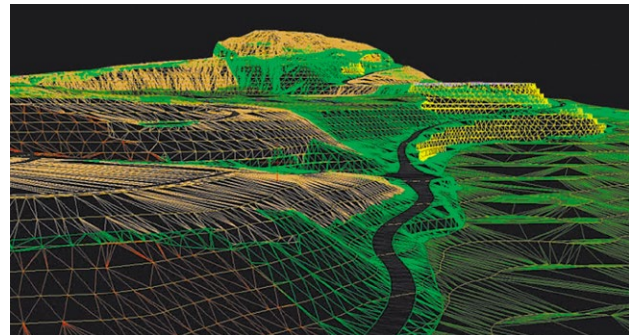
SEQRA, CEQR and ULURP in Land Development *(new)*

Attendees will gain a better understanding of the City Environmental Quality Review (CEQR) process for land development projects in the City of New York. It will also explain how CEQR is related to land use approvals such as Uniform Land Use Review Procedure (ULURP) and demonstrate, through case studies, how CEQR can affect building design and programming.

Only available in NY.

Understanding Site Grading: Considerations That Can Impact Your Project's Bottom Line

This seminar offers an overview of how engineers and architects perform site grading and clarifies how site constraints, design regulations, and other considerations can have an impact on the grading design and the project's budget.



Introduction to Mobile Mapping

Attendees will learn the basics of mobile mapping including history, trends, components, and uses. This course provides an overview of the hardware and software involved, plus steps needed to make mobile mapping project decisions.

Sustainable Planning - What Does it Mean?

The audience will learn how to design with nature in mind, minimize footprint on the surrounding environment, preserve future generations, and foster environmental stewardship.

This course is also worth one Green Building Certification Institute CMP credit.



Indoor Air Quality Microbial Investigations

Students will gain an understanding of regulatory requirements, legislation, practices, and potential health effects from exposure.



Best Practices in Site Preparation

This course outlines a process for investigating a site prior to the start of construction for subsurface conditions that could affect the construction budget and schedule. The focus is on researching site history, performing non-intrusive geophysical subsurface investigations to detect below-grade elements, and exploring the field using borings and test excavations.

Traffic Engineering: Essentials for Architects

Attendees will gain insight into traffic issues that affect their projects during the planning, design, and construction phases. The course focuses on traffic impact analyses, driveway and circulation design, roadway infrastructure improvements, and roadway mitigation. The course will also provide technical insights for the “big picture” items including connectivity between various parking, pedestrian and traffic elements, layout of driveways, signage and wayfinding, and pedestrian safety.



Landscape Plantings: Value, Challenges, and Sustainable Solutions

Participants will review planting solutions for dense, urban, and historic city sites, rooftop gardens, and brownfield land development projects.

This course is also worth one Green Building Certification Institute CMP credit.



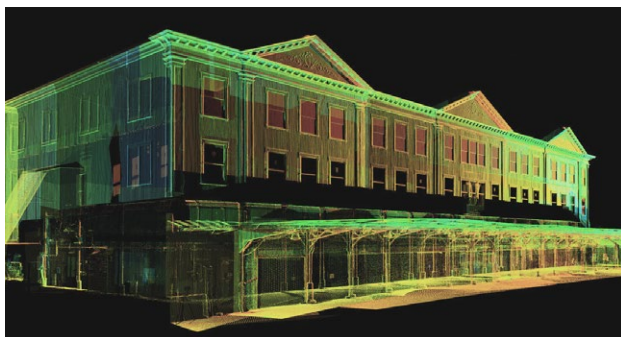
On-site Wastewater Treatment – Constructed Wetland Systems

Attendees will learn about design, site, and permitting considerations that should be addressed for on-site constructed wastewater wetland systems, which are an effective sustainable design alternative to more traditional wastewater systems.

This course is also worth one Green Building Certification Institute CMP credit.

The Role of the Geotechnical Consultant in the Design Process

Attendees will learn about the essential value added that comes from having a quality geotechnical consultant fully engaged in a project from start through construction. The course will highlight how the geotechnical consultant can fit into the project consultant flow.



3D Laser Scanning: Capturing the Whole Picture

This course provides an overview of advanced surveying techniques and uses of interior and exterior laser scanning technology relative to the architecture field.

Sustainable Site Development and Regenerative Design: The Role of the Site/Civil Engineer

This course improves participants' knowledge of the land development process and promotes "practical thinking" early in the design process.

This course is also worth one Green Building Certification Institute CMP credit.



Elements of Traffic Engineering & Transportation Planning

An overview of the basic components of traffic engineering and event management is provided, as well as the long-term importance of proper transportation engineering for new and existing sites.

Only available in OH, WV, and western PA



Stability, Subsidence, and Soil Hazards: Three Key Issues Your Geotechnical Engineer Should Address

Every land development professional and designer should be aware of these hazards. Attendees will learn to identify types of geology and how they may become potential hazards, plus identify design solutions when these hazards are present.

Only available in CA, OH, WV, and western PA

Site/Civil Engineering in both Urban and Rural Environments

This presentation explores the site/civil land development process including the differences between planning within urban and rural areas. It explains the benefit of practical thinking early on in the design process and encourages communication between architects and engineers early and often.

Only available in OH, WV, and PA



Karst Geology

Attendees will learn the definition of karst geology and how to identify it, discuss the hazards associated with site development in karst geology, and review best practices to reduce such hazards.

Only available in PA and NJ



Environmental Land Use Permitting: Its Role in Site Development and Design

This course addresses the land development process related to the preservation and enhancement of natural resources on project sites. It identifies the architect's role in environmental regulatory/permitting requirements and environmental preservation.

SuperTall Buildings: Site Exploration, Foundation Engineering, and Constructability

Attendees will gain insight into the necessary steps to select, analyze, and construct the foundation for a supertall structure. The course also addresses constructability, quality assurance, and quality control of the selected foundation scheme.



Site/Civil in Urban Environments

This course presents the unique characteristics of site/civil engineering in the urban environment. Participants will gain understanding of the scope of the practice including site design, public right of way improvements, and the permitting agencies with jurisdiction in both cases.

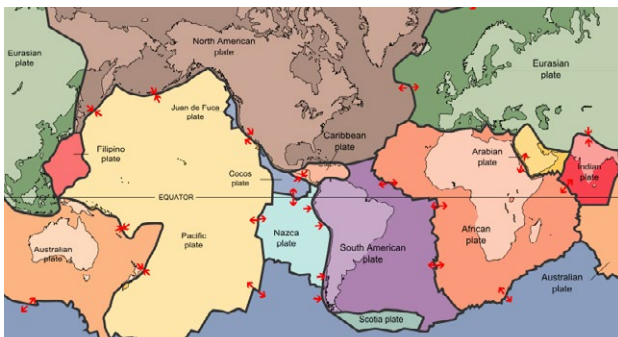
Site Planning and Mapping in Flood Zones

Participants will learn to interpret the latest flood maps and the implications on site design and building code design requirements. The course also provides insight into how civil and geotechnical engineers can help evaluate the options.



Hazardous Materials (HAZMAT) Management

This course addresses hazardous materials and the health, safety, and environmental concerns associated with land development. Participants will gain practical knowledge of proper HAZMAT management and its connection to cost savings for current and future construction.



Seismic: Earthquake Fundamentals

Participants will gain an understanding of how to evaluate ground shaking activity and how it affects the design process and existing structures.

Only available in CA.

Toxic Vapor and Methane Intrusion Mitigation System Design

Participants will learn how the design of sub-slab vapor intrusion mitigation systems is integrated with the A/E team's design for new or existing buildings and adds value to the project.

Only available in CA.



The Role of the Site/Civil Engineer in the Design Process

Attendees will learn the importance of involving the site/civil engineer early in the land development design process. The course will improve the participant's knowledge of the design process and the importance of communication between the design team early and often.

Fundamentals of Geothermal Loop Field Design

As an introduction to geothermal heat pump technology, participants will begin to understand the pros and cons of each type of system and loop field design/configuration.

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