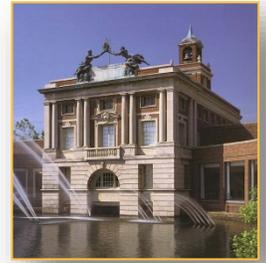


The Institute Nela Park 2017 Course Schedule



Fundamentals of Lighting

Tuition: \$650

Length: 2 ½ Days (not eligible for LEUs)

Dates: May 16-18, July 11-13, October 17-19, December 12-14

Credit: 1.5 CEUs

Level: Basic

**Approval needed for registration*

Course Description

Our most popular course designed for newcomers to the lighting industry, Fundamentals of Lighting always attracts a diverse group of aspiring lighting professionals. Through lectures, full-scale lighting demonstrations and workshops, participants are taught basic lighting concepts and definitions; they learn to identify and compare major lighting solutions and where they can be used in a variety of applications; they will design basic lighting layouts, and learn how to calculate economic and environmental benefits of lighting upgrades. Specific application modules cover retail and hospitality, office and healthcare, industrial and warehouse, and outdoor area lighting.

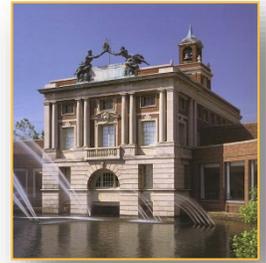
Learning Objectives

- Understand basic lighting terms and definitions including lumens, footcandles, candelas, correlated color temperature (CCT) and other color metrics
- Learn about different lighting technologies, focusing on LED solutions, and basic lighting control strategies
- Review sustainability initiatives, and understand building energy codes and energy efficiency legislation
- Understand basic lighting economics and environmental benefit estimates.
- Understand the basic lighting design process and specific design considerations for key indoor and outdoor applications.
- Overview of product solutions

**To register:
Contact your local GE representative,
or visit www.GELearningCentral.com**

**Additional questions?
Call The Institute at 1-800-255-1200**

The Institute Nela Park 2017 Course Schedule



Intermediate Lighting

Tuition: \$450

Length: 1 ½ Days

Date: June 7-8, August 16-17, November 14-15

Credit: 1.0 CEU

Level: Intermediate

PREREQUISITES: Completion of Fundamentals of Lighting

**Approval needed for registration*

Course Description

Intermediate Lighting is offered as a continuation of the Fundamentals of Lighting course. The agenda includes some new topics of interest to lighting practitioners as well as more in-depth coverage of topics introduced in the Fundamentals class. This course will advance people along to the path to becoming “lighting experts” with particular emphasis on knowledge required to excel in this new world of LEDs. Advanced topics in color metrics particularly relevant to LEDs will be discussed including an examination of the insufficiency of CRI and attempts to fill the gap with measures like R9, Gamut Area and CQS (Color Quality Scale). Photometric measures will be examined in more detail and consideration given to factors involved in selecting the right luminaire for retrofit applications and new construction. Other topics will include lighting control strategies and an introduction to “intelligent environments.”

Pre-requisite: Completion of the Fundamentals of Lighting class or equivalent.

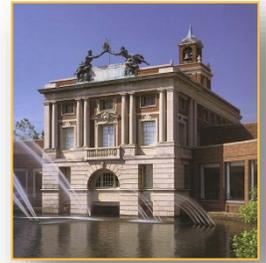
Learning Objectives

- Understand key topics in color and other performance metrics being discussed in the industry today particularly as they pertain to LED systems.
- Better understand lighting photometrics and their roles in the luminaire selection process.
- Understand how lighting layout calculations are different for non-LED and LED luminaires. Evaluate the performance of lighting solutions using lighting layout tools and economic analysis calculators.
- Understand the importance of control strategies as a sustainable technology to balance proper light levels while achieving cost effectiveness targets.
- Appreciate the advancements of intelligent environments, which are taking lighting infrastructure beyond efficiency measures to connected environments.
- Overview of product solutions

**To register:
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**Additional questions?
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The Institute Nela Park 2017 Course Schedule



NEW

Basics of Controls

Tuition: \$450

Length: 1 ½ days

Date: June 27-28, 2017

Credit: 1.0 CEU & 2.0 AIA credits available

Level: Basic to Intermediate

**Approval needed for attendance*

Course Description

Lighting constitutes a significant percentage of the operational impact on buildings and sites, while at the same time having a substantial effect on occupants' comfort, safety, and productivity. Based on the latest IES (Illuminating Engineering Society) guidelines as well as recent code & legislative changes, this course will evaluate applicable lighting solutions utilizing controls. Of particular focus, will be the comparison of today's LED systems and controls vs. traditional lighting systems based on lighting quality, economics, power density, legislation and other metrics. Hands-on workshops will familiarize participants with design features and benefits based on lighting layouts and cost of light/environmental benefit calculations. The portfolio offered by Current, powered by GE will be presented.

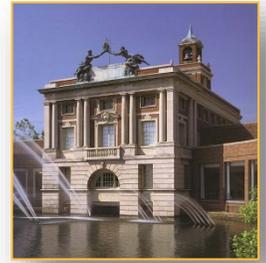
Learning Objectives

- Understand the basics of controls technology and the various energy efficiency strategies to use for applications
- Understand the role of LED vs. non-LED solutions in meeting energy, environmental and maintenance targets; thus, reducing resources and improving occupant comfort.
- Evaluate the performance of lighting solutions using lighting layout tools, and cost of light and environmental impact calculators.
- Understand compliance with lighting codes and standards related to energy, safety, legislation and the environment.

To register:
Contact your local GE representative,
or visit www.GELearningCentral.com

Additional questions?
Call The Institute at 1-800-255-1200

The Institute Nela Park 2017 Course Schedule



BACK BY POPULAR DEMAND

LED Outdoor Lighting

Tuition: \$450

Length: 1 ½ days

Date: June 20-21, 2017

Credit: 1.0 CEU & 2.0 AIA credits available

Level: Intermediate

**Approval needed for attendance*

Course Description

Outdoor lighting design is significantly and rapidly transforming. The advancement of LED technology and controls, code introductions such as the Model Lighting Ordinance (MLO), and the potential of realizing “intelligent environments” through lighting have prompted awareness by business owners, property managers and municipalities to analyze their current lighting systems and evaluate upgrade options. Increased energy efficiency, reduced maintenance, enhanced safety and security, control of light trespass and light pollution, and optimization of resource allocation are driving the adoption of advanced LED solutions. This course evaluates some of the latest LED outdoor lighting and control solutions for area lighting, parking garages, walkways, roadways and building facades for commercial, municipal and institutional properties. Through interactive presentations and hands-on workshops, participants will learn how to evaluate today's LED solutions and prepare accurate comparative economic analyses. A review of case studies will reveal best practices. The portfolio offered by Current, powered by GE will be presented.

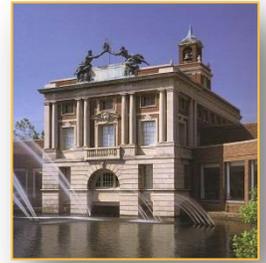
Learning Objectives

- Learn about general LED technology, and the impact on outdoor lighting design. Evaluate technical information and economic analyses on conventional technologies (HID) compared to LED systems in specific outdoor applications.
- Review roadway and area lighting codes.
- Understand the importance of control strategies as a sustainable technology to balance proper light levels while achieving energy and cost effectiveness targets.
- Appreciate the advancements of intelligent environments, which are taking lighting infrastructure beyond efficiency measures to connected environments.

**To register:
Contact your local GE representative,
or visit www.GELearningCentral.com**

**Additional questions?
Call The Institute at 1-800-255-1200**

The Institute Nela Park 2017 Course Schedule



LC Exam Preparation

Tuition: \$650

Length: 3 Days

Date: September 26-28

Credit: 1.5 CEU (not eligible for LEUs)

Level: Intermediate / Advanced

RECOMMENDED: Completion of Fundamentals of Lighting & Intermediate Lighting

**Approval needed for registration*

Course Description

This comprehensive 3-day course is designed to provide participants with an in-depth final review, prior to taking the Lighting Certified (LC) exam administered by the National Council on the Qualifications for the Lighting Professions (NCQLP). A panel of experts will provide an overview of subject matter identified by NCQLP in the examination content outline. Topics include; survey/audit procedures, the lighting design process, financial analysis, installation and commissioning, operations and maintenance, and regulatory compliance. Prior to taking this course, participants are strongly encouraged to review primary reference materials recommended by NCQLP. (This course is not associated with NCQLP. Completion of this course does not guarantee that the participant will pass the LC exam.)

**To register:
Contact your local GE representative,
or visit www.GELearningCentral.com**

**Additional questions?
Call The Institute at 1-800-255-1200**