

HURRY!!! REGISTER NOW, SPACE IS LIMITED...

IES FOL-09 is a seven-session course: Wednesday evenings, 6:00-8:00pm, February 7th through March 21st, 2012. The registration fee listed below includes the FOL-09 class material.

REGISTRATION FEES MUST BE PAID IN ADVANCE.

MAKE CHECKS PAYABLE TO:
IES MILWAUKEE SECTION

To register, please print this form and send the completed form along with payment to the address mentioned below.

Name: _____

Title: _____

Company / School: _____

Address: _____

City: _____

State: _____ Zip: _____

Day Phone: _____

Email: _____

I will attend the IES FOL-09 Lighting Course. Attached is a check for:

\$175.00 Standard Cost

\$125.00 Student Cost

CONFIRMATION WILL BE SENT VIA EMAIL.

Mail form and payment to:

IES LIGHTING COURSE
c/o Andrew Slater
GRAEF
125 S. 84th Street
Milwaukee, WI 53219

A 3x3 grid of lightbulbs in various colors (yellow, pink, blue, red, green, purple) with text overlays. The top row contains the text 'FUNDAMENTALS OF LIGHTING'. The middle row contains 'WINTER 2012'. The bottom row contains 'JOIN US AND LEARN THE BASICS OF LIGHTING'. At the bottom of the grid, it says 'SPONSORED BY: IESNA ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA' with the IES logo in the center.

**FUNDAMENTALS
OF LIGHTING**

**WINTER
2012**

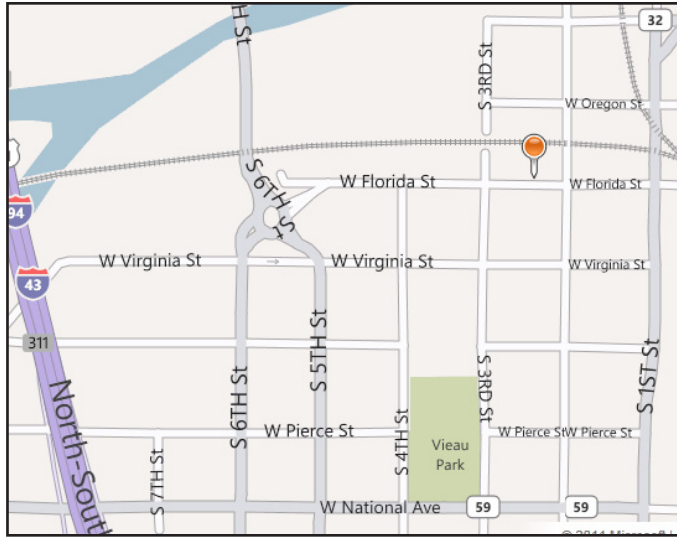
**JOIN US AND LEARN THE
BASICS OF LIGHTING**

**SPONSORED BY:
IESNA
ILLUMINATION ENGINEERING
SOCIETY OF NORTH AMERICA**

LOCATION:

Facilities kindly provided by:

Wisconsin Energy Conservation Corporation
234 W. Florida Street, Suite 302
Milwaukee, WI



Room location details will be forwarded by email to registered attendees before the first class.

*** Please provide an email address with registration!

PARKING:

Due to the density of the downtown Milwaukee area, reserved parking is not available. Attendees should plan on parking on the streets.

COURSE MATERIALS:

Participants will receive the IES FOL-09 Text

COURSE CREDITS

FOL-09 participants can be eligible for:

- 17 IESNA CEU credits
- 17 AIA LU credits
- 14 credit-hours usable for WI Commercial Electrical Inspector and Journeyman/Master Electrician certifications

For more information, contact
Andrew Slater
414-266-9186
andrew.slater@graef-usa.com

OVERVIEW AND COURSE TOPIC:

This seven-week course provides participants with an introduction to the fundamentals of illumination. It gives a comprehensive overview on basic lighting principles, lamp and luminaire types, lighting calculations, and controls, as well as functional and aesthetic applications. This course is ideal for architects, engineers, designers, contractors, manufacturers, distributors, and students.

February 8th

Module 1 - History, Defining Light, Vision, & Color

In this introductory presentation we will cover the history of light and lighting, define light through both physics and metrics, illustrate the four components of vision, and discuss various aspects of color theory from color mixing to the color rendering index.

Jimalee Dakin, LC, LEED AP
Visa Lighting

February 15th

Module 2 - Light Sources & Ballasts

Light sources including incandescent, fluorescent, high intensity discharge lamps and LED's will be presented. Lamp and LED operating principles, applications, equipment necessary to power these sources, and other considerations will also be reviewed.

Michael Lynch, LC
Philips Lighting Systems &
Controls

Howard Wolfman, PE
Lumispec Consulting

February 22nd

Module 3 - Luminaires and Controls

Common luminaire types, their mounting and applications, as well as mounting arrangements are presented. Types of control devices including switching, sensors, and time clocks, control requirements, and lighting control strategies are further discussed.

Kurt Yager, LC
Enterprise Lighting

February 29th

Module 4 - Photometry & Lighting Calculations

The elements of a photometric report (the standard descriptor of fixture light output) will be discussed. An overview of the two lighting design calculation methods, the Lumen Method for average illuminance, and the point method for illuminance at a point, will also be presented along with their uses in the design process.

Chris Glandt, LC, MIES
Visa Lighting

March 7th

Module 5 - Lighting for Interiors

The lighting design process and the principles behind lighting design for interiors are discussed. Applications and innovative designs explicate these techniques.

Marty Peck, LC, IALD, MIES
Creative Lighting Design & Engineering

March 14th

Module 6 - Lighting for Exteriors

Great lighting effects are not just for the indoors. Exterior lighting that is considerate of the environment and still gives maximum visual performance will be presented.

Dan Walsh, LC
Innovation Energy Solutions

March 21st

Module 7 - Issues in Lighting

The phases of the design process are presented. Other important topics in lighting design are covered ranging from sustainability to health issues.

Shanna Olson, LC
IBC Engineering

Holly Blomquist, LEED GA
Harwood Engineering

