

Location...

Facilities kindly provided by:

Mount Mary College
2900 N Menomonee River Pkwy



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

**Please provide an email address with registration!*

Parking

Visitor parking is available in both parking lots. There is also easy street parking adjacent to the college

Course Materials

Participants will receive the Lighting Fundamentals Text and a copy of the Lighting Handbook Ready Reference Guide. Those who register after February 1st cannot be guaranteed course materials on the first day of class.

Course Credits

Lighting Fundamentals participants can be eligible for:

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

For more information, contact

Shanna Olson
262-522-4425
shannaol@ibcengineering.com

Overview and Course Topics...

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 11th

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 18th

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/
Howard Wolfman PE**

**GE Consumer & Industrial/
Lumispec Consulting**

February 25th

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 4th

Class Break-

Participants will be invited to attend the Milwaukee Section's monthly meeting as an opportunity for enrichment. More details will be available as the date approaches.

Location to be determined

March 11th

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.

Randy Janicek

**Engineered
Representation, Inc.**

March 18th

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

**Creative Lighting Design &
Engineering**

March 25th

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.

Yazi Fletcher LC

**Phoenix Products
Company, Inc.**

April 1st

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.

**Steven L. Klein IALD LC IESNA/
Shanna Olson**

**Klein Lighting/
IBC Engineering**

**Hurry! Register Now,
Space is Limited...**

Lighting Fundamentals is a seven-session course: Thursday evenings, 7:00-9:30pm, February 11th through April 1st, 2010. The standard registration fee is \$250 and includes the Lighting Fundamentals text and a copy of the IES Lighting Handbook Ready Reference Guide.

Registration fees must be paid in advance.
Make checks payable to:
IES Milwaukee Section

To register, please make a photocopy of this form and send the completed form along with payment to the address below.

Name _____

Title _____

Company/
School _____

Address _____

City _____

State _____ ZIP _____

Day Phone _____

Fax # _____

E-mail _____

I will attend the IES Lighting Fundamentals Course.
Attached is a check for:

- \$250.00 Standard Cost
- \$125.00 Student Cost w/reference guide
- \$75.00 Student Cost w/o reference guide

CONFIRMATION WILL BE SENT VIA EMAIL.

Mail form and payment to:

IES Milwaukee Section
c/o Shanna Olson
IBC Engineering Services, INC.
N8W22195 Johnson Drive, Suite 180
Waukesha, WI 53186



Illuminating Engineering Society of North America
Milwaukee Section
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