COURSE OVERVIEW:
This ten-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, sales reps, customer service reps, manufacturers, distributors, and students. Full module descriptions on reverse.

WHEN
FEBRUARY 25TH THRU APRIL 28, 2020
(Snow days 5/5 & 5/12 if needed)
6:00pm - 8:30pm

WHERE
Milwaukee Location:
HGA
333 East Erie Street, Milwaukee, WI 53202
Free on-street parking available at 6pm

Madison Location (via webinar):
Faith Technologies
22 Transport Ct, Madison, WI 53704
Free parking onsite

Questions? Contact: Teresa Jackson
tjackson@wi.rr.com, 262-665-8980

ONLINE REGISTRATION
Pre-registration is required and registration fees must be paid in advance. To register, please complete the electronic form at: www.iesmilwaukee.org/fundamentals-of-lighting

Online payments via Paypal and pre-paid checks are accepted.

25 CEU’s Available!

Course fees
$400 Standard Registration
$100 College Student

SIGN UP TODAY!
Registrations received after February 12th may not receive materials in time for the first class.

www.iesmilwaukee.org/fundamentals-of-lighting.com
2020 FOL Course Syllabus:

Module 1, February 25 – History, Professional Practice, Defining Light, Vision, Color, and Light & Health
Teresa Jackson, LC, MIES (Enterprise Lighting & Controls)
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.

Module 2, March 3 – Electric Light Sources and Auxiliary Devices
Eric Haugaard (Cree)
Light sources including filament, gas discharge and solid state (LED) will be presented. Lamp applications, equipment necessary to power these sources, and other considerations will also be reviewed.

Module 3, March 10 – Daylighting
Holly Blomquist, LC, MIES, LEED Green Associate (Ring & DuChateau)
This session will introduce daylight as a light source in buildings, including design considerations, daylight delivery systems, control methods, performance and metrics.

Module 4, March 17 – Luminaires
Kyle Kichura, LC, MIES (Franklin Energy Services)
Luminaire forms and optics are introduced along with classifications by application, distribution, and mounting method. We will discuss additional luminaire attributes relating to performance and maintenance.

Module 5, March 24 – Controls
Randy Janicek, MIES (Engineered Representation, Inc.)
Lighting control types, strategies, methods and protocols are introduced in this session. In addition, integrating lighting controls with other building systems and a discussion of controls applications is included.

Module 6, April 7 – Lighting Design Process and Techniques, Sustainability & Commissioning
Shanna Olson, LC, MIES, Affiliate IIDA (IMEG Corp.)
The lighting design process, from programming through construction is reviewed in depth. We will discuss factors for design decisions and application considerations as part of the overall design process. Industry ratings for sustainability including LEED, and building commissioning practices are also covered.

Module 7, April 14 – Photometry, Metrics, & Computer Calculations
Chris Glandt, LC, MIES (Visa Lighting)
The elements of photometric testing and reporting will be presented. The role of lighting design calculation as part of the design process is reviewed, and calculation methods, including the Lumen Method for average illuminance, and the point method for illuminance at a point, will be presented and applied. Computer calculations and rendering techniques are also discussed.

Module 8, April 21 - Lighting for Interiors
Barbara Lee, LC (IMEG Corp.)
The art and craft of interior lighting, applied in various building and space types, is a make-or-break factor in an overall interior design. Examples of designs are shown and the role of lighting within the well-designed interior is discussed. We will also discuss research relating to human perception and reaction to interior environments, and the important role of lighting within those findings.

Module 9, April 28 – Lighting for Exteriors
Yazi Fletcher, LC, MIES (Red Sky Lighting)
Great lighting effects are not just for the indoors. Exterior lighting methods and applications from public spaces to roadways to sports lighting is discussed. The effect of lighting on the exterior environment, and exterior lighting controls techniques are also included.