

FUNDAMENTALS OF LIGHTING FALL 2023

hosted by IES Chapter 38, Milwaukee, WI

COURSE OVERVIEW

This 20-hour course provides participants with an introduction to the fundamentals of illumination. It gives a comprehensive overview of basic lighting principles, lamp and luminaire types, lighting calculations, and controls, as well as functional and aesthetic best practices in application. This course is ideal for architects, engineers, designers, contractors, sales reps, customer service reps, manufacturers, distributors, and students. Find an outline for each module below. Note there will be no class the weeks of Halloween and Thanksgiving.

WHEN:

SEPTEMBER 19th through DECEMBER 5th,
2023 5:30pm - 7:30pm

WHERE:

GRAEF, 275 W Wisconsin Ave Suite 300,
Milwaukee, WI 53203
Virtual via Teams. Audio and video
required for remote students.

QUESTIONS?

Call Teresa Jackson at 262-665-8980.

REGISTRATION

**Pre-registration is required
and registration fees must
be paid in advance.**

**To register, please complete
the form on page 3
and submit to:**

teresa@spectrumltg.com

**Accepting Online payments
via Paypal and checks
now.**

Registrations received after September 1st may not
receive materials in time for the first class.

**20 CEU's
AVAILABLE**

AIA/HSW/DSPS (#23311)

COURSE FEES:

\$400 Standard Registration

\$200 College Student





2023 FOL Course Syllabus

Module 1: Introduction to Light and Lighting **--September 19, 2023--**

Teresa Jackson, MIES (Spectrum Lighting)

1. A brief history of light and lighting
2. Professional practice
3. The physics of light
4. Vision
5. Color
6. Light and health

Module 2: Electric Light Sources **--September 26, 2023--**

Eric Haugaard (Cooper Lighting Solutions)

1. Introduction to electric light sources
2. Legacy sources
3. Incandescent
4. Fluorescent
5. High Intensity Discharge
6. Solid state

Module 3: Daylighting **--October 3, 2023--**

Holly Blomquist, LC, MIES, LEED
Green Associate (Ring & DuChateau)

1. Introduction to daylighting
2. Characteristics of daylight
3. Delivering daylight
4. Integrating daylight and electric light
5. View
6. Modeling daylight

Module 4: Luminaires **--October 10, 2023--**

Kyle Kichura, LC, MIES (AM Conservation Group)

1. Introduction to luminaires
2. Luminaire optics
3. Classification
4. Mounting
5. Interior luminaires
6. Exterior luminaires

Module 6: Metrics, photometry, **calculations, and rendering** **--October 17, 2023--**

Chris Glandt, LC, MIES (Visa Lighting)

1. Introduction
2. Photometry: Lab and Reports
3. Calculations
4. Point method calculations
5. Lumen method calculations
6. Computer modeling
7. Field Measurements

Module 5: Lighting Controls **--October 24, 2023--**

Randy Janicek, MIES (Engineered Representation, Inc.)

1. Introduction to Lighting Controls
2. Dimming
3. Sensors: presence detection
4. Sensors; light detection
5. Networked systems
6. General considerations

Module 7: Codes, Standards, and Practice **--November 7, 2023--**

Justin Hendrickson, LC, MIES (JTH Lighting Alliance)

1. Introduction
2. Electrical and Building Codes
3. Energy Codes
4. Aspirational Standards
5. Lighting Standards
6. Economics

Module 8: Lighting for Interior Environments **--November 14, 2023--**

Colleen Kroll, LC, MIES (Ring & DuChateau)

1. Fundamentals of lighting design
2. Languages of lighting design
3. Visibility and comfort
4. Visual experience
5. Attraction and display
6. Light and architecture
7. Wellness and sustainability

Module 9: Lighting for Exterior **Environments --November 28,** **2023--Yazi Fletcher, LC, MIES**

1. Lighting for dark environments
2. Parks, campuses and civic spaces
3. Streets and roadways
4. Parking facilities
5. Athletic facilities
6. Facades and landscapes
7. Sustainability and wellness

Module 10: REVIEW **--December 5, 2023--**

Teresa Jackson, MIES (Spectrum Lighting & Controls)

1. Lighting basics
2. Vision & Perception (color, contrast)
3. Daylight, Electric Light, Controls
4. Light & Professional Practice
5. Balancing Needs and Sustainability
6. Resources

REGISTRATION FORM

FUNDAMENTALS OF LIGHTING - FALL 2023

NAME _____

COMPANY NAME _____

STREET ADDRESS _____

CITY/STATE/ZIP _____

EMAIL ADDRESS _____

PHONE NUMBER _____

PAYMENT METHOD

PAYPAL: EMAIL ADDRESS TO WHICH INVOICE SHOULD BE SENT

CHECK: MAIL PAYMENT TO:

PATRICK HUTCHINSON, TREASURER, IES MILWAUKEE CHAPTER 38

KLIC USA, LLC
2840 N Brookfield Rd, Ste 3
Brookfield WI 53045

Online registration will be available through our website by September 1, 2023.
Check our Education Page for availability of this registration method at:

<https://iesmilwaukee.org/education/>