



**Illuminating**  
ENGINEERING SOCIETY

**Springfield /Central Illinois Section**

3-13-2018

# **BRILLIANCE:** The Next Level of Lighting and Learning

**Registration is Open — Event Date — March 28th, 2017**

*The Central Illinois IES is pleased to announce a full day education event for professionals who want to dig deeper into lighting. We Look forward to seeing you there!*

*Join us at the Alumni Center—Illinois State University,  
1101 N Main Street Normal, IL 61761*

*Our presenter is David Warfel, Associate AIA, IES, USITT*



**FOCAL POINT™**  
Bringing It All To Light™

## **Topic: BRILLIANCE** **The Next Level of Lighting and Learning**

### Course Description:

Advance your lighting knowledge with a full day of immersive continuing education. Learn to see light with new eyes and learn how to use light in new ways with expert lecture, live demonstration, and hands-on lighting labs in an active and engaging atmosphere. Enhance your next project with deeper knowledge of light & color, light & health, design theory, fixtures, and details. **Credit is approved by AIA and IES for 7 LUs, including 6 HSW for architects.**

### Schedule:

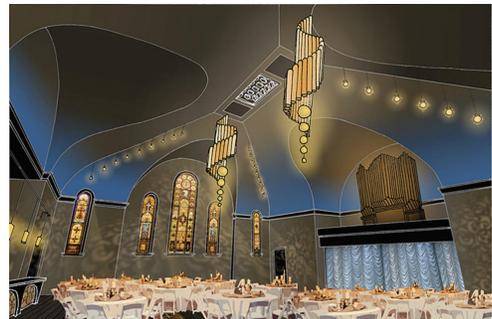
- 8:30am Registration & Continental Breakfast
- 9:00am BRILLIANCE 1
- 12:00pm Lunch with the Pros (included)
- 1:00pm BRILLIANCE 2
- 4:00pm End of Day

Detailed Agenda follows this page



### Fee:

- IES Members : \$ 100.00
- Non-Member: \$ 125.00



David is a lighting designer, author, and educator who practices at the convergence of architectural and theatrical lighting. The former head of theatrical lighting design at the University of Illinois at Urbana-Champaign, pioneered LED stage lighting & taught overlapping courses in theatre and architecture. A veteran of AIA continuing education, his work has been featured in Lighting Magazine (Australia), Lighting & Sound America, Live Design, and Theatrical Design & Technology. He has presented at LDI, USITT, and AASHE conferences and writes and blogs on many aspects of lighting design. His professional design career includes multiple projects on the Las Vegas Strip, cruise ships, restaurants, schools, churches, and homes across the country.

**[CLICK HERE TO ORDER AND RESERVE YOUR SPOT](#)**

For any additional Questions, Please feel free to contact

[Marsha Fogarty](#) - President IES Central IL or [Kevin McCartan](#)—Treasurer IES Central IL

The Central IL IES Section would like to Thank Our Sponsors **Elite Lighting** and **Focal Point Lighting**

## **Brilliance Version 1**

February 23, 2018

### **Session 1: Seeing Light**

1.5 LU/HSW

Light is an essential element of life, affecting our every moment. Yet most of us go through our days without ever truly seeing or recognizing the individual components of light that work on our eyes, body, and mind. Explore the controllable qualities of light, experience the dynamics of natural light, and immerse yourself in the myriad of possibilities in artificial light. Examine how a tiny change in angle or mounting location can completely alter the look and feel of a space or object, and be prepared to use light in new and exciting ways.

1. Qualities of Light: Participants will identify and explain the four controllable qualities of light and how they can be used to impact perception.
2. Natural Light: Using the four qualities, we will analyze natural light and its effects on our visual environment.
3. Artificial Light: Through live demonstration, participants will analyze the qualities and effects of artificial light.
4. Angles: We will discover how angles and locations change perception of humans and materials in three dimensional hands-on labs.
5. HSW: Design Interiors, Occupant Comfort, Equipment, Physical Wellbeing

### **Session 2: The Full Spectrum**

1.5 LU/HSW

Light *is* color, and understanding how to leverage the color of light for architecture can turn ordinary projects into award-winners. Color can change our mood, trigger alertness, brand our projects, attract customers at night, help us find our way, create dynamic experiences, and make our buildings disappear or stand out. Take the mystery out of Color Temperature, Color Rendering and Color Adaptation with live demonstrations of the beauty and power of color and light.

Learning Objectives

1. Seeing Color: What is color, and how do we see it? Participants will answer these questions through investigation of light and the human eye.
2. Color Temperature: Participants will examine color temperature and explore practical realities of its use.
3. Color Mixing: Through live demonstration, participants will define and use additive and subtractive color mixing.
4. Color Adaptation: Participants will experience color relativity and understand the implications of color constancy and lateral adaptation on lighting design.
5. HSW: Design Interiors, Occupant Comfort, Materials and Methods: Equipment

### **Session 3: Technology & Technique**

1.5 LU/HSW

Behind every artistic lighting design is a scaffold of technology and technique designed to support the aesthetic and biological goals. Explore cutting-edge optics and distribution

possibilities, dig into modern control systems that help us get more out of light, and understand the peripheral devices needed to make a complete working lighting system.

Learning Objectives:

1. Optics & Distribution: Participants will discover through hands-on demonstrations how different optical systems affect perception and distribution of light sources.
2. Control Systems: Participants will compare simple wallbox controls and complex central dimming systems and reasons for controlling light.
3. Peripherals: Participants will understand peripheral lighting system components including drivers, ballasts, power supplies, & housings.
4. Specification: Participants will develop a systematic approach to specifying light fixtures using mockups and manufacturer cut sheets.

#### **Session 4: A Design Language**

1.5 LU/HSW

Explore the natural history of humans and light to identify how light can be leveraged for more comfortable, functional, and healthy interior environments. Learn a new language for discussing light with clients and occupants, delve into circadian health and emerging technological potential, and apply layered lighting design solutions to commercial, residential, and hospitality spaces.

Learning Objectives

1. Natural Theory: Participants will identify task, ambient, accent, and dynamic layers of natural light and discover parallel strategies in artificial light.
2. Language of Light: Participants will understand the purpose of task, ambient, and accent light along and investigate the application of light for aging eyes, changing tasks, and value demonstration.
3. Light & Health: Participants will be able explain the link between light and circadian hormone shifts and identify common strategies for balancing artificial light.
4. Layers in Design: Using case studies, participants will evaluate common lighting design solutions for occupant comfort, energy savings, and design aesthetics.
5. HSW: Physical/Social Wellbeing, Energy Efficiency, Interiors, Occupant Comfort, Equipment

#### **Bright Ideas**

1.0 LU

The broad arc of the lighting design profession encompasses designers, manufacturers, representatives, distributors, showrooms, and a host of others with a wealth of experience and expertise. Hear from a wide range of professionals from different corners of the industry discuss emerging lighting technology, favorite design techniques, practice insights, and common pitfalls.

Learning Objectives

1. Lighting Technology: Participants will explore a variety of emerging lighting technologies and attempt to discern the future of the profession.

2. Lighting Techniques: Participants will discover professional lighting techniques used by industry leaders to differentiate their projects and provide aesthetic beauty to the built environment.
3. Lighting Design Practice: Participants will explore the practice and profession of lighting design including discussion of lighting designers, manufacturers, and representatives.
4. Lighting Pitfalls: Participants will be able to explain common pitfalls in lighting design and be able to avoid costly mistakes.

### **Program Schedule**

8:30 Registration  
9:00 Session 1  
10:30 Session 2  
12:00 Bright Ideas Session  
1:00 Session 3  
2:30 Session 4  
4:00 End of Day