



**PHILIPS**

Lighting Education

2018 Specifier Seminars

# Brighter thinking, better learning.

Philips Continuing Education Programs offers architects, engineers, and designers across Canada the opportunity to gain credits by attending seminars designed to meet the changes and trends in the lighting industry.

Philips Lighting  
**Concept Centre**

### **Introduction to Philips** (1 hour self directed credit)

Many market conditions require that we position ourselves to be flexible and responsive. New legislation, code changes, sustainable design, manufacturing techniques and new light sources continuously challenge our product designers and engineers. What are the current lighting industry issues and what is Philips doing behind the scene to respond?

### **Daylighting: Nature's Energy Saver** (1 hour self directed credit)\*

Daylighting, the art of bringing or allowing natural sunlight into interiors has been around since the beginning of time. It's romantic, environmentally friendly and energy efficient. Daylighting is often misunderstood and poorly designed as a result. We'll take you through the basic dos and don'ts of daylighting, while offering design suggestions and new technologies that can provide you with the best of all aspects when designing with the sun.

### **Design Considerations for Healthcare** (1 hour self directed credit)

This program is designed to examine the trends in healthcare lighting applications. We will focus on financial trends and issues, an aging population, new technology and the impact it has on healthcare; LED's impact, light therapy research, effects light has on the biological clock, daylight needs and creating healthy lighting environments in healthcare applications.

### **Environmental Lighting for Exteriors** (1 hour self directed credit)\*

Environmental concerns are a pressing issue in every aspect of our lives. Exterior lighting is no different. Light pollution

and light trespass are not only design issues but are now becoming regulated more often by government organizations. Whether it is for security, parking, or design aesthetics this program is for anyone working on lighting exteriors.

### **Healthy Lighting for Senior Living** (1 hour self directed credit)\*

As we age, the physical and aesthetic manners in which we see are altered. A mature eye requires more light to function while being increasingly more sensitive to glare. The session will discuss some of the physiologies of this change and explore avenues to combat the changes in both institutional and residential applications. Awareness, empathy and knowledge are the keys to lighting solutions for the aging eye.

### **Light and Its Effect on Circadian Rhythms** (1 hour self directed credit)

Humans have daily, or circadian, rhythms. The secretion and suppression of many hormones through the day affect our alertness, memory, intelligence, sleep patterns and soundness. Light is a critical element in these rhythms. We know the importance of proper lighting. But are we also aware of the importance of proper darkness?

### **Light and Its Effect on Colour** (1 hour self directed credit)

The colour qualities of a light source are directly responsible for the appearance of colour in any object. Terms such as "warm white" and "cool white" are just the tip of the iceberg. This seminar demonstrates the understanding of colour temperature and CRI in order to specify light and colour suited to the needs of the space and your clients.

### **Lighting for Educational Facilities** (1 hour self directed credit)

Lighting supports communication and instructional media, while providing lighting for visual tasks, ambiance and safety. The instructional spaces of both educators and students must be considered within the design process. Specialized classrooms like computer rooms and science laboratories have specific lighting needs, as do larger teaching spaces like auditoriums and gymnasiums. Learn how lighting benefits our well-being by using lighting to activate bodily responses, increase energy levels and/or promote a relaxed environment through individual or programmed control of light levels and colour temperatures.

### **Lighting for Wellbeing in Office and Institutional Applications** (1 hour self directed credit)\*

This program is designed to examine new thinking in terms of lighting design when it comes to office application. Creating a space focused on the wellbeing of occupants, as well as the environment, is a strategy that can help promote worker productivity, satisfaction of employees and the financial bottom line. Lighting design is a strategy that can be used to focus on employee's, guests and the environment in order to create a dynamic and productive space.

### **Lighting Merchandising Areas** (1 hour self directed credit)

Lighting is an important contributor to the retail environment, which can create mood and atmosphere, as well as help generate sales. A retail space's lighting design can inform the consumer of the corporate image as well as price point and target audience. Utilizing various lighting techniques, building upon the layers of light and choosing the correct luminaires are essential.

# Application seminars.

Our certified lighting professionals help to equip you with the tools to improve job performance and further reinforce your relationship with your clients.

## **Office Lighting for the 21st Century** (1 hour self directed credit)

Office lighting is in a constant state of flux. Changing tasks and the desire for flexibility have led to new recommendations and technological innovations in the design process of lighting office environments. Learn about the luminaire selection process along with fixture technologies as they relate to various electronic tasks in the modern workplace.

## **Quality of the Visual Environment** (1 hour self directed credit)

Lighting design has evolved well beyond product specifications and lighting calculations. A great lighting design merges the art and the science of lighting into a work of art. By taking into account the critical issues in each space and melding the aesthetic aspects, lighting designs can be fabulous to look at, while being functional and comfortable to the people in the space.

## **Lighting and Sustainability** (1 hour self directed credit)

Sustainable design has become a major force in our world and more specifically, in the lighting industry. Codes and standards have become more stringent over the past decade, and initiatives such as LEED (Leadership in Energy

and Environmental Design) have challenged us to re-evaluate how we approach lighting design. This session will provide an overview of standards and codes, and how lighting strategies can contribute credits toward LEED certification.

## **LEDs and Health** (1 hour self directed credit)

There is much conversation concerning LEDs and their effects on our health. As with everything LED, much of what is being discussed only has a finger-tip grasp of the truth. Much has still yet to be completely investigated. We will look at some of these concerns and try to shed some light going forward.

## **LEDs and the New Lighting Metrics** (1 hour self directed credit)

As we head toward more and more LED usage, the way we discuss lighting and quantify different aspects of lighting is modified. We have had to change the way we discuss LEDs due to its unique characteristics as new metrics are being invented, discussed, debated and implemented. Some metrics that were utilized infrequently in the past are now far more prominent and understanding them is critical for any specifier or end-user of lighting products.

## **LEDs and Everything you Need to Know** (1 hour self directed credit)

The hype surrounding LEDs is inescapable. Should an LED lamp or fixture be used for every application? To answer this question, you need to understand your options, how to apply the technology you choose, and a complete understanding of how LEDs work. How do LEDs match up in areas like energy efficiency and the environment, colour rendering capabilities, and life when compared to other sources? This seminar will take a “light” approach while dealing with the technical aspects of each source.

## **Roadway Lighting** (1 hour self directed credit)

This seminar will give an overview of the unique requirements to provide the best in roadway lighting. Since this lighting is predominantly required in the mesopic range of vision, it has its own specific issues and solutions. We will delve into Roadway and Tunnel lighting and discuss the physiological needs of each at the required light levels.

A maximum of 12 hours total is available for a two day program.

\* Recommended for specifying engineers

# Technology seminars.

Our certified lighting professionals help to equip you with the tools to improve job performance and further reinforce your relationship with your clients.

## **Philips Power over Ethernet (PoE)** (1 hour self directed credit)\*

With PoE technology, luminaires receive power and data over a single standard ethernet cable, therefore eliminating the need for separate power cabling. With the simple click of a connector, PoE luminaires become part of a complete integrated connected lighting system, delivering extraordinary illumination experiences and value beyond illumination. Give users personal control over their preferred light settings via a specially designed Smart Phone app. With integrated sensors, PoE luminaires can track activity patterns, daylight levels, and in the near future; humidity, CO2, temperature or other data. We will look at how this data allows facility managers to gain deep insight into building operations, helping them to optimize the delivery of resources, enhance the experience and performance of occupants, and support improved asset management.

## **Sustainable Design, Controls & Energy Standards** (1 hour self directed credit)\*†

Sustainable design provides quality lighting while minimizing the impact of operation and construction on the environment. How can we provide sustainable design solutions? We will take you

through an overview of control methods and examine energy efficiency requirements and how they affect lighting for interior and exterior environments. We will look at the functional role of daylight and how LEED accreditation and Green Building practices have pushed us to find more energy efficient design solutions.

## **Lighting and the Internet of Things** (1 hour self directed credit)\*

The transition with LED has kicked off a new phase of LED adoption — the race to connect every socket. A trifecta of qualities — ubiquity, network connectivity and access to power — make intelligent lights a perfect platform on which the promise of the Internet of Things (IoT) can come to life. Behind the scenes, this race to own sockets is really a contest to see who will control the infrastructure of the IoT across our environment. These intelligent, networked, sensorladen lights of the near future will form the central nervous system of every smart building. Learn how the IoT can have a meaningful impact for your client.

## **The LED Evolution** (2 hour self directed credit)\*

LED has the potential to revolutionize lighting application and design. LED technology has been rapidly advancing and has provided exciting new options in providing illumination for many applications.

LED has been singled out as the next generation light source for lighting in homes, offices, streets, and parking lots. This seminar focuses on the differences between LED and more traditional light sources, and the performance characteristics of their applications. You will also be provided with the tools to learn about myths and misconceptions of LEDs and its ever-changing technology.

## **Mastering Lighting Controls & Systems** (1 hour self directed credit)\*

Its amazing what a lighting control system can do. Combined with the broad selection of energy-efficient light sources and luminaires, the lighting control system gives users the confidence to create ambience, develop innovative and distinctive lighting themes and transform environments. By implementing a range of energy management strategies, such as sensors, zoning, daylight harvesting, dimming and time-based control, users can optimize energy use, while maintaining comfort levels and maximizing cost savings. With a commitment to deliver innovative energy management, home/building automation, and architectural lighting solutions, we can create sophisticated and energy-efficient lighting control solutions for residential, offices, retail, hospitality, industry, stadiums, public spaces, and more.

A maximum of 12 hours total is available for a two day program.

\* Recommended for specifying engineers  
† Subject to availability

# Application specific spec product seminars.

These seminars go into detail on specific products and their use in different applications. These qualify only as product training Continuing Education Credits.

## **Outdoor & Exterior**

Exterior lighting provides the ability to navigate safely through the nighttime environment, but issues such as light pollution and light trespass can make weighing the options a difficult task. By understanding the performance characteristics of outdoor product solutions, one can make an informed decision as to how to approach each application. Whether for parking lots or enhancing architecture, there are a myriad of products available that combine performance and aesthetics for your needs.

## **Commercial**

Commercial and office environments have continued to evolve as new technologies are introduced into the workplace. From recessed to suspended linear, lighting has kept pace by providing innovative luminaires that provide visual comfort and exceptional performance as part of a sustainable lighting solution.

## **Institutional**

Studies have shown that lighting can affect human health, both physically and emotionally. Choosing luminaires that create a pleasant healing environment whether in hospitals or long-term care facilities is of the utmost importance. See the available product solutions available from Philips Luminaires to enhance your institutional application.

## **Retail & Hospitality**

Creating the right impression and reflecting brand identity in the competitive retail / hospitality landscape has become increasingly challenging. Choosing the right lighting products and incorporating control strategies can assist in attracting the customer, producing a pleasant experience, and generating repeat business.

## **Color Kinetics**

LEDs have become the light source of the future, with a plethora of options to choose from. Whether it's tunable white, colour changing LEDs, or luminous panels, Color Kinetics can provide the palette to illuminate your architectural canvas.

## **Controls**

Current trends in codes and standards have begun to mandate controls for various applications. Therefore, one must become familiar with the various controls strategies available. From simple wallbox dimmers, occupancy sensing, to distributed dimming systems, see how controls can provide energy savings and create mood and atmosphere to any given environment.

## **Industrial**

Lighting can affect human health, both physically and emotionally. Choosing luminaires that create a pleasant environment and assist with performing tasks is crucial in industrial applications. See how choosing the right industrial lighting products can provide energy savings, higher productivity and safer work environments for all when enhancing your industrial application.



Food Pendant  
LED Rose

Food Pendant  
LED Frost

StyliD LED  
Champagne

StyliD LED  
Authentic White

Retail food

Food is  
star in

recipes sh



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