## THE RMLA SHORT COURSE TECHNICAL TRACK

You should take this track if you work in . . .

- product development or manufacturing and want more depth in vision, color, optics and photometry
- technical sales and want to better understand the basis for many of the technical terms and metrics used in lighting
- electrical engineering or technically oriented lighting design consulting firms and want to better balance the technical aspects of lighting with the design aspects

## You should take this track because you want to . . .

- gain a deeper understanding of the fundamentals of visual performance, visual perception, photometry, color, and optics, including an overview of non-visual effects of light
- acquire hands-on experience with photometric measurements
- explore the foundations and applications of important lighting metrics, including the new IES TM-30 color metrics and new metrics related to melanopic (non-visual) effects
- sharpen your software skills through hands-on experience with popular software packages
- learn the latest about emerging lighting technologies, such as LED luminaires and lighting controls
- · gain an appreciation for lighting design and the aesthetics of light

#### This may not be the right course for you if . . .

- you are a designer who is primarily interested in the art of lighting
- you love hands-on creative mock-ups but don't enjoy calculations and analyses
- you are a highly experienced optical engineer working in lighting with a good grasp of important lighting metrics (but then again, a refresher never hurts!)
- you have less than one year of experience working in lighting (the content assumes some basic familiarity with lighting lingo and practices)

#### Track details (see next page for full schedule)

Course begins at 8:30 AM on Thursday (continental breakfast available at 8:00 AM)
Course ends at 1:00 PM on Sunday (Travel from DIA should not be scheduled before 3:00 pm)
Coffee and pastries, break snacks and lunch included each day
An evening reception is included

Additional information: http://www.colorado.edu/rmla/



## THE RMLA SHORT COURSE TECHNICAL TRACK - OVERVIEW OF SCHEDULE

## Thursday - Lighting & People

8:00 AM Continental breakfast\*

8:30 AM Delivering light to people: An overview of the lighting industry\*

Lighting quantities & concepts: Hands-on experiences\*

Vision, spectrum, and human responses\*

Light and color discussion & exercises\* Light and health discussion & exercises\*

Evening Welcome gathering\*

## Friday - Lighting & Technology

8:30 AM Technology trends in lighting (SSL, IoT, MatSci)\*

Lighting & Technology Case Study\*

Photometry and optics

Hands-on lighting measurement exercises

5:30 PM Adjourn

## Saturday - Lighting & Design

8:30 AM Lighting design process and case studies\*

Light, architecture and perception exercise\*

Analysis of photometric data

Luminaire design and simulation software

5:30 PM Adjourn

# Sunday

8:30 AM Hands-on work on luminaire optics project

Course wrap-up and discussion; lunch\*

1:00 PM Adjourn

<sup>\*</sup> These course sessions are held jointly with the RMLA Design Track.



# LIGHTING EDUCATION FOR PROFESSIONALS

## THE RMLA SHORT COURSE DESIGN TRACK

You should take this course if you work in . . .

- lighting design and want more depth in developing strong design concepts
- lighting sales and want to grasp how designers incorporate new technology into their designs
- engineering or product development and want to understand the design aspects of lighting
- interior design, architecture, or theater and want to develop new expertise

## You should take this course because you want to . . .

- gain a deeper understanding of the design process
- be able to describe the aesthetic qualities of light
- translate desired aesthetic qualities into design concepts
- sharpen skills in developing and communicating cohesive lighting concepts
- practice presenting and defending your concepts to a group
- acquire hands-on experience with different lighting products and materials
- experiment with different ways to solve practical lighting challenges
- learn the latest about LED luminaires, controls, and other emerging lighting technologies
- gain new ideas for applying daylighting into architectural interiors
- practice applying technical information such as TM-30 color metrics, product cut sheets, and light and health considerations to your designs

## This may not be the right course for you if . . .

- you are a highly technical person who is primarily interested in the science of lighting
- you love to run lots of calculations but don't enjoy hands-on concept experiments
- you are a highly experienced lighting designer with a formal lighting background and strong conceptual skills (but then again, a refresher never hurts!)
- you have less than one year of experience working in lighting (the content assumes some basic familiarity with lighting lingo and practices)

#### Track details (see next page for full schedule)

Course begins at 8:30 AM on Thursday (continental breakfast available at 8:00 AM)
Course ends at 1:00 PM on Sunday (Travel from DIA should not be scheduled before 3:00 pm)
Coffee and pastries, break snacks and lunch included each day
An evening reception is included

Additional information: http://www.colorado.edu/rmla/



# LIGHTING EDUCATION FOR PROFESSIONALS

# THE RMLA SHORT COURSE DESIGN TRACK - OVERVIEW OF SCHEDULE

## Thursday - Lighting & People

8:00 AM Continental breakfast\*

8:30 AM Delivering light to people: An overview of the lighting industry\*

Lighting quantities & concepts: Hands-on experiences\*

Vision, spectrum, and human responses\*

Light and color discussion & exercises\*
Light and health discussion & exercises\*

Evening Welcome gathering\*

## Friday - Lighting & Technology

8:30 AM Technology trends in lighting (SSL, IoT, MatSci)\*

Lighting & Technology Case Study\*

Design project: Concepts

Design project: Field work

5:30 PM Adjourn

## Saturday - Lighting & Design

8:30 AM Lighting design process and case studies\*

Light, architecture and perception exercise\*

Design project: Schematic Design

5:30 PM Adjourn

#### Sunday

8:30 AM Design project: Design documentation & communication

Design project presentations

Course wrap-up and discussion; lunch\*

1:00 PM Adjourn

<sup>\*</sup> These course sessions are held jointly with the RMLA Technical Track.