

## THE RMLA TECHNICAL COURSE

*You should take this course 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 course 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
- 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!)

### **Course details (see next page for full schedule)**

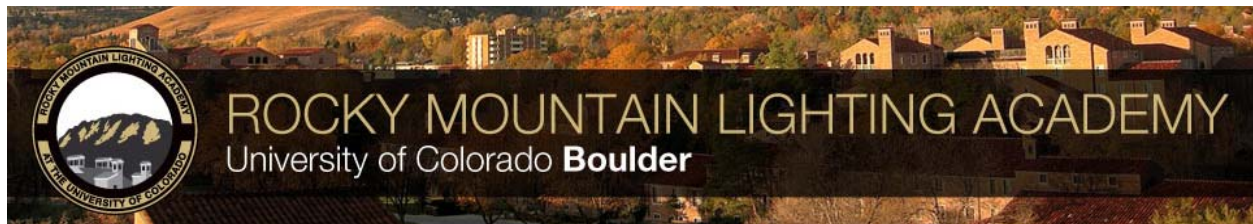
Course begins at 8:30 AM on Thursday (breakfast available at 8:00 AM)

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

Evening reception and farewell lunch included

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



## THE RMLA TECHNICAL COURSE – OVERVIEW OF SCHEDULE

### Thursday

- 8:00 AM      Course begins  
Welcome and introductions  
Delivering light to people: An overview of the lighting industry  
Light, vision and perception  
*Hands-on visual perception exercise in CU Campus buildings*  
Light and color: New metrics  
Light and health: Non-visual effects of light
- 6:00 PM      Informal gathering at a downtown Boulder venue

### Friday

- 8:30 AM      Photometry introduction  
Sources, luminaires and controls  
Photometry: A deeper dive into technical performance data  
*Hands-on lighting measurement exercise*
- 7:00 PM      Group dinner

### Saturday

- 8:30 AM      Introduction to the aesthetics of light  
*Hands-on lighting aesthetics exercise*  
*Hands-on modeling luminaire performance using simulation software*  
Lighting design process: Turning a concept into reality  
Aesthetics of light student presentations and discussion
- 7:00 PM      Free evening

### Sunday

- 8:30 AM      *Hands-on work on luminaire optics project*  
Course wrap-up and discussion; lunch
- 1:00 PM      Adjourn

*Italicized topics are active learning sessions that require students to participate and complete an assignment.*