

8:00 - 9:00 a.m.		Code Requirements for the Layout and Design of Fire Alarm Systems - Tim Poo, PE (4 CEUs)	Update of Changes for the 2018 NFPA 70E - Steve Abbot, PE (3 CEUs)		Professional Ethics in Engineering - John F. Greenhalge (2 PDH)		BICSI North Central Region Meeting - BlcSI Accreditation will be offered
9:00 - 10:00 a.m.					Managing LED Luminaire Costs: Correct Specification can Reduce Your Cost - Acuity (1 AIA, LU HSW)		
10:00 - 11:00 a.m.					The Effect of Light on Health and Well Being: Basics and Applications - Mariana Figueiro (1.5 AIA, LU, PDH)		
11:00 a.m. - 12:00 p.m.							
12:00 - 1:00 p.m.	Electro Expo 2018 (3 CEUs)			2017 NEC / Encore and Riffle & Associaties		Interconnection Requirements for Wind Turbines and Solar Panels - FirstEnergy	
1:00 - 2:00 p.m.		Power Quality: Making the Most of Your Energy - Mario Teti (2 CEU's)			Ashrae 90.1 - Matt Priebe (1 CEU)		
2:00 - 3:00 p.m.			NEC: Protecting Critical Circuits from Fire and Life Safety Circuits - Mark Hall (1 CEU)		Industrial Lighting Fundamentals - Acuity (1 AIA, LU HSW)		
3:00 - 4:00 p.m.							
4:00 - 5:00 p.m.							
5:00 - 6:00 p.m.		NAED Member and Prospective Member Meet Up					
6:00 - 7:00 p.m.							
7:00 - 8:00 p.m.							
8:00 - 9:00 p.m.							

9:00 - 10:00 a.m.		Understanding the Scope of an Arc Flash Study - Steve Abbott (3 CEUs)		Enabling the Internet of Things through Digital Lighting - John McBride ((1 AIA, LU HSW)		Physical Security at the Infrastructure Layer - Scott W. Ware (1 BICSI)
10:00 - 11:00 a.m.			Top Ten 2017 Changes, Top Ten 2020 Proposed Changes, Codes, Standards & Submission Process - Tim McClintock (2 CEUs)	The Future of the Lighting Industry - Dr. Jack Curran (1 AIA, LU HSW)		HDBAseT Deep Dive Technology Exploration - Joseph Cornwall - (1 BICSI)
11:00 a.m. - 12:00 p.m.		New Generation of Medium Voltage Switchgear - Joseph Richard (1 CEU)			Evaluating Light Source Color Quality Using IES TM-30-15- IES Regional Meeting - Dr. Kevin Houser (1 AIA, LU HSW)	
12:00 - 1:00 p.m.	Electro Expo 2018 (3 CEUs)	How to Perform an Electrical Risk Assessment - Steve Abbott (3 CEUs)				
12:30 - 1:00 p.m.			Smart Grid with the Illuminating Company			
1:00 - 2:00 p.m.			Standby Power Generator Systems - Designs & Applications - Mike Sonnhalter (1 CEU)	IES Cleveland Board of Managers and District Meeting	FirstEnergy Commercial & Industrial Incentive Programs Chris Joss (1)	Emerging Clinical Solutions Center - Cleveland Clinic - Dr. Will Morris/Brent Hicks (1 BICSI)
2:00 - 3:00 p.m.					Lean for Design & Construction - Rocco Gallo and Armando Francisco (1 CEU)	Everything IP: In Three Short Years, Everything will Change. Is Your Network Ready (1 BICSI, AIA)
3:00 - 4:00 p.m.						
4:00 - 5:00 p.m.						
5:00 - 6:00 p.m.						
6:00 - 7:00 p.m.						
7:00 - 8:00 p.m.						
8:00 - 9:00 p.m.						

electro expo 2018



powering
innovation +
technology

WEDNESDAY, MARCH 7

8:00 a.m. - 12:00 p.m.	Code Requirements for the Layout and Design of Fire Alarm Systems	Timothy G. Pool, PE, RCDD, ESI 7011, Director of Electrical Engineering, Principal,	4 credits / OCILB, PDH
8:00 a.m. - 11:00 a.m.	Update of Changes for the 2018 NFPA	Steve Abbott - Stark Safety Consultants	3 credits / OCILB, PDH
8:00 a.m. - 10:00 a.m.	Professional Ethics in Engineering	John F. Greenhalge, State of Ohio	2 credits / PDH
9:00 a.m. - 10:00 a.m.	Managing LED Luminaire Costs: Correct Specification Can Reduce Your Cost	Acuity	1 AIA, LU HSW
9:00 a.m. - 4:00 p.m.	BICSI North Central Regional Meeting		5 BICSI CECs
10:30 a.m. - 12:00 p.m.	The Effect of Light on Health and Well Being: Basics and Applications	Mariana Figueiro PhD., Director - The Lighting Institute Research Center (LRC) and Professor of Architecture at Rensselaer	1 AIA, LU HSW, PDH
11:00 a.m. - 12:00 p.m.	Arc Quenching Technology and UL2748	Dan Hrcir, PE - Eaton Corp.	1 credit/ OCILB, PDH
12:00 p.m. - 9:00 p.m.	Electro Expo 2018 Trade Show	Trade Show	3 credits / OCILB, PDH
12:00 p.m. - 4:00 p.m.	NEC 2017	Encore Wire /Riffle & Assoc.	4 credits / OCILB, PDH
1:00 p.m. - 3:00 p.m.	Power Quality: Making the Most of Your Energy	Mario Teti, Schneider Electric	2 credits / OCILB, PDH
1:00 p.m. - 2:00 p.m.	ASHRAE 90.1-2010 Energy Standard for Buildings Except Low Rise Residential Buildings	Matt Priebe, Karpinski Engineering	1 credit / OCILB, PDH
1:00 p.m. - 2:00 p.m.	Requirements for Wind Turbines and Solar Panels	FirstEnergy	1 credit / OCILB, PDH
2:00 p.m. - 3:00 p.m.	NEC: Protecting Critical Circuits from Fire and Life Safety Circuits	Mark Hall, Pentair	1 credit / OCILB, PDH
2:00 p.m. - 3:00 p.m.	Industrial Lighting Fundamentals	Acuity	1 AIA, LU HSW
5:00 p.m. - 7:00 p.m.	NAED New Member and Prospective Member Meet Up		

THURSDAY, MARCH 8

9:00 a.m. - 11:00 a.m.	Understanding the Scope of an Arc Flash Study	Steve Abbott, Stark Safety Consultants	3 credits / OCILB, PDH
9:00 a.m. - 10:00 a.m.	Enabling the Internet of Things through Digital Lighting	John McBride, Acuity	1 AIA, LU HSW
9:00 a.m. - 10:00 a.m.	Physical Security at the Infrastructure Layer	Scott W. Ware, Great Lakes Case & Cabinet	1 BICSI AIA
10:00 a.m. - 11:00 a.m.	HDBaseT Deep Drive Technology Exploration	Joseph Cornwall, Legrand	1 BICSI
10:00 a.m. - 12:00 p.m.	NEC: Top Ten 2017 Changes, Top Ten 2020 Proposed Changes, Codes & Submissions	Tim McClintock, NFPA	2 credits / OCILB, PDH
10:00 a.m. - 11:00 a.m.	The Future of the Lighting Industry	Dr. Jack Curran, LED Transformations	1 AIA, LU HSW
11:00 a.m. - 12:00 p.m.	New Generation of Medium Voltage Switchgear	Joseph Richard, Schneider Electric	1 credit/ OCILB, PDH

11:00 a.m. - 12:30 p.m.	IES Cleveland: Evaluation Light Source Color Quality Using IES TM-30-15	Dr. Kevin Houser, Penn State University	1 AIA, LU HSW
11:00 a.m. - 12:00 p.m.	5 Steps to Building WiFi Networks	Jussi Kivineimi, Jerry Olla - Ekahau	1 BISC
12:00 p.m. - 3:00 p.m.	How to Perform an Electrical Risk Assessment	Steve Abbott, Stark Safety Consultants	3 credits / OCILB, PDH
12:00 p.m. - 8:00 p.m.	Electro Expo 2018 Trade Show	Trade Show	3 credits / OCILB, PDH
12:30 p.m. - 2:30 p.m.	IES Cleveland Board of Managers and District Meeting		
12:30 p.m. - 1:30 p.m.	Smart Grid with the Illuminating Company	The Illuminating Co./FirstEnergy	1 credit / OCILB, PDH
1:00 p.m. - 2:00 p.m.	Standby Power Generator Systems: Design & Applications	Mike Sonnhalter, Buckeye Power Sales	1 credit / OCILB, PDH
1:00 p.m. - 2:00 p.m.	FirstEnergy Commercial and Industrial Incentive Programs	Sodexo	1 credit / OCILB, PDH
1:00 p.m. - 2:00 p.m.	Emerging Clinical Solutions	Clinic	1 BICSI
2:00 p.m. - 3:00 p.m.	Lean for Design & Construction: Saying "No" to the Status Quo	Rocco Gallo, Karpinski Engineering and Armando Francisco, Lake Erie Electric	1 credit / OCILB, PDH
2:00 p.m. - 3:00 p.m.	Everything IP: In Three Short Years, Everything will Change. Is Your Network Ready?	Troy Parvin, Berk-Tek LLC	1 BICSI, AIA

Colors indicate educational track, classes are open to all:

Clean Energy

Lighting

Low Voltage Systems

Power/Electrical