

CEDIA University On the Road



Salon Son & Image

MARCH 24–27, 2010 • MONTREAL HILTON BONAVENTURE • MONTREAL, QUEBEC

CEDIA University will travel to the annual Salon Son & Image event to be held at the Montreal Hilton Bonaventure in Montreal, Quebec March 25–28 (CEDIA education will be held March 24–27).

Education offerings will include deeply discounted curriculum from the Electronic Systems Designer (ESD) and Electronic Systems Technician (EST) colleges as well as a seminar on green technologies and two CEDIA Certification exam opportunities. CEDIA will also provide education for architects, builders, interior designers, and related professionals through its Industry Outreach curriculum.

Who is CEDIA?

The Custom Electronic Design & Installation Association (CEDIA) is an international trade association of companies that specialize in designing and installing electronic systems for the home. CEDIA provides its members with education, networking, and tools to run a successful business.

CEDIA University provides education for CEDIA members and the electronic systems industry. CEDIA University education allows participants to build their knowledge and skill sets, prepare for CEDIA Certification exams, and advance their careers.

Salon Son & Image Show Hours

Thursday, March 25	9 a.m. – 5 p.m.
Friday, March 26	11 a.m. – 9 p.m.
Saturday, March 27	10 a.m. – 6 p.m.
Sunday, March 28	10 a.m. – 5 p.m.

CEDIA Education Offerings

WEDNESDAY, MARCH 24

Course Title	Time
Electronic Systems Technician Workshop	8 a.m. – 4 p.m.
Retrofit Installation	9 a.m. – 12 p.m.
Principles of IP Networking	2 p.m. – 5 p.m.

THURSDAY, MARCH 25

Course Title	Time
Video Display Technology for Installers	10 a.m. – 1 p.m.
Fundamentals of Distributed Audio Systems	10 a.m. – 1 p.m.
Video Set-up and Calibration	2 p.m. – 5 p.m.
Advanced Distributed Audio	2 p.m. – 5 p.m.

FRIDAY, MARCH 26

Course Title	Time
Getting Into Green: Understanding LEED and Green Building Programs	11 a.m. – 12:30 p.m.
Canadian EST II Exam	2 p.m. – 5 p.m.
Canadian EST III Exam Pre-Test Assessment	2 p.m. – 5 p.m.

SATURDAY, MARCH 27

Course Title	Time
Top Ten Technology Trends	10 a.m. – 11:30 a.m.
Hiding Technology	10 a.m. – 11:30 a.m.
Home Theater Design and Construction (French)	10 a.m. – 11:30 a.m.
Lighting Control (French)	10 a.m. – 11:30 a.m.
Home Theater Design and Construction	1 p.m. – 2:30 p.m.
Lighting Control	1 p.m. – 2:30 p.m.
Hiding Technology (French)	1 p.m. – 2:30 p.m.

ELECTRONIC SYSTEMS TECHNICIANS & DESIGNERS

EST **EST200 Electronic Systems Technician Workshop**
Wednesday: 8 a.m. – 4 p.m.
CEU Value: 5.0

This full day workshop is designed for electronic systems technicians (ESTs) with 18-24 months of experience. The goal of the course is to broaden knowledge and help prepare the participant for real-world job challenges in areas such as home theater layout and installation, system verification and professional behavior. Course participants should possess awareness of basic installation techniques and audio/video signals and their uses. Participants are encouraged to take educational EST200-level CEDIA courses after completing this workshop. At the conclusion of this course, participants should be able to:

- Apply the tenets of proper professional behavior, jobsite safety and adherence to codes
- Explain various advanced installation techniques that can be applied to either new construction or retrofit/remodel jobs
- Describe principles of home theater layout and installation, including speaker placement, display mounting and component installation
- Discuss verification of an A/V system including documentation, client instructions and component performance

Fees: \$299

EST **EST308 Retrofit Installation**
Wednesday: 9 a.m. – 12 p.m.
CEU Value: 3.0

The purpose of this course is to explain the three Ps of retrofitting: Planning, patience, and practice. This course will cover specific ways to address the challenges of installing equipment and cable in an existing home. This course also includes tips and techniques on how and when to use specific retrofitting tools. At the conclusion of this course, participants should be able to:

- Plan and organize a retrofitting project which minimizes the impact to the client's existing home
- List five standard retrofitting tools and elaborate on how and when to use them
- Describe how and where to use tools for making holes, pulling and locating wire, and making wall openings
- Implement retrofitting techniques in three different construction settings

Recommended prerequisites: EST102, EST104

Fees: \$49

EST **EST313 Principles of IP Networking**
Wednesday: 2 p.m. – 5 p.m.
CEU Value: 3.0

The purpose of this course is to introduce participants to the protocols, equipment, and installation of small home and office networks. It is appropriate for both beginner and advanced participants looking to increase their network knowledge base. At the conclusion of this course, participants should be able to:

- Discuss some past and present applications for computer networks
- Explain common network protocols such as TCP/IP, DHCP, SMTP, and NAT
- Select, install, and configure consumer routers for wired and wireless environments
- Evaluate and manage security threats to networks
- Create and implement IP addressing schemes for connected network devices (computers, AV, lighting control, etc.)

Recommended prerequisite: EST302

Fees: \$49

EST **EST251 Video Display Technologies for Installers**
Thursday: 10 a.m. – 1 p.m.
CEU Value: 1.5

The purpose of this course is to educate participants on current display technologies, describe their resolution and contrast ratio and explain their compatibility with standard driver sources. This course instructs participants on display mounting considerations and techniques including power, wiring, safety precautions, height, viewing angle, and component neatness. Topics include how to account for human and environmental factors impacting the design and placement of video displays and creative solutions to challenging video display situations. At the conclusion of this course, participants should be able to:

- Describe the human and environmental factors to consider in the design, selection, and installation of video display systems
- List available display types (CRT, LCD, Plasma, and DLP) and identify the resolution performance of each
- Justify display selection based on criteria such as resolution, size, black levels, motion artifacts, altitude, and light
- Explain how resolution and contrast ratio impacts the choice of display driver
- Explain mounting considerations and techniques for display installation
- Identify appropriate power, wiring, height, and viewing angles to customize layout requests
- Approach challenging layout requests with confidence and creativity

Fees: \$49

EST **EST311 Video Set-up and Calibration**
Thursday: 2 p.m. – 5 p.m.
CEU Value: 3.0

The purpose of this course is to teach participants about video set-up and calibration. Topics in this course include how to identify the types and functions of various video display components and how to adjust and calibrate those components including basic calibration for brightness, contrast, color, saturation, tint and setting the proper gray scale. This course also defines video standards and covers the various tools needed to perform calibration. At the conclusion of this course, participants should be able to:

- Identify the types, functions and categories of video projection components
- List common video compression standards, video formats and standard signal levels.
- Perform video level adjustments to ensure the best possible brightness, contrast, color and gray scale
- Choose the proper tool or test pattern in order to ensure a properly calibrated display
- Outline the specific steps for video signal set-up and grayscale calibration

Recommended Prerequisite: ESPA 203

Fees: \$49

ESD **ESD211 Fundamentals of Distributed Audio Systems**
Thursday: 10 a.m. – 1 p.m.
CEU Value: 3.0

The purpose of this course is to educate people in the industry about the design and specification of multi-room/multi-zone audio systems. This course focuses on the application of the four primary ways that amplification is provided in distributed audio systems: discrete channel, constant voltage and local amplification. In addition, it provides in depth coverage of the calculations necessary to determine the required amplification as well as the impedance and power distribution of various configurations. At the conclusion of this course, participants should be able to:

- Discuss the trade-offs and benefits of discrete channel, shared channel, constant voltage and local amplification
- Determine the amplification necessary to achieve a target sound pressure

ELECTRONIC SYSTEMS TECHNICIANS & DESIGNERS

level (SPL)

- Calculate the impedance and power distribution within various speaker matrices
- Specify the wiring topology and setting for each amplification type
- Define the procedures necessary to validate and calibrate a distributed audio system
- Determine the required amplification, cooling/ventilation, wire sizes and types and calculate the pathways and junctions typically use.

Recommended Prerequisite: ESD111

Fees: \$49

ES D **ESD311 Advanced Distributed Audio**
Thursday: 2 p.m. – 5 p.m.
CEU Value: 3.0

The purpose of this course is to education people in the industry about the design and specification of multi-room/multi-zone audio systems. This course covers acoustical concepts and other factors affecting optimal speaker selection and placement in various settings. It also addresses appropriate sound pressure level (SPL) and methods for achieving uniform coverage as well as performance considerations, aesthetics and control techniques. At the conclusion of this course, participants should be able to:

- Develop a common frame of reference with clients and conduct an appropriate client-needs analysis
- Design a distributed audio system incorporating advanced performance, aesthetics and control/integration techniques
- Identify acoustical properties and factors influencing optimal speaker selection and placement, including trade-offs between in-room, in ceiling and in-wall speakers
- Design and specify distributed audio systems that meet identified performance criteria

Recommended Prerequisite: ESD211

Fees: \$49

ES D **ESD026 Getting Into Green: Understanding LEED and Green Building Programs**
Friday: 11 a.m. – 12:30 p.m.
CEU Value: 1.5

The one sector of the residential building industry that is currently experiencing solid growth is the design and construction of environmentally conscious homes. There are currently two programs that certify a home's true impact: The United States Green Building Council's LEED certification and the National Association of Home Builders' Green Building certification. This three-hour course will give a detailed discussion of each program and where ESC's can make a direct impact on the project. At the conclusion of this course, participants should be able to:

- Compare and contrast LEED and Green Building certification programs
- Identify areas within each certification program where their company can make an impact
- Identify whether or not Green is a viable business opportunity within their company

Fees: \$29

ES D **ESTII Canadian EST II Exam**
Friday: 2 p.m. – 5 p.m.
Fees: \$250 (Members)/\$350 (Non-Members)

ES D **Canadian EST III Exam Pre-Test Assessment**
Friday: 2 p.m. – 5 p.m.
Fees: \$37 (Members)/\$57 (Non-Members)

ARCHITECTS, BUILDERS, INTERIOR DESIGNERS, AND RELATED PROFESSIONALS

CIO004 Home Theater Design and Construction
Saturday: 10 a.m. – 11:30 a.m. (French); 1 p.m. – 2:30 p.m. (English)

What is a home theater? This may sound like a simple question, but is it? Participants in this course will come away with a very distinct definition of what a home theater is—and what it isn't! Discussions will also include basic acoustical physics, common mistakes in design and construction, "points to remember" to achieve a solid, repeatable process, and spatial and usage considerations. This course will provide guidance related to what goes in the room—from equipment, to wall treatments, to lights—and how to analyze common problems associated with home theater design and construction. Additionally, attendees will learn how, when, and why to engage a trained electronic systems contractor (ESC) early in the design and build process.

This course is recognized as providing "CORE Learning" credit to members of the Ontario Association of Architects (OAA) and the Architects' Association of New Brunswick (AANB). This course is recognized as providing "Self-Directed Learning" credit to members of the Order of Architects of Quebec (OAO).

Association:	AIA	AIBD	IDCEC	NAHB	NARI
Credit:	1.0 LU	1.0 CEU	0.1 CEU	1.0 Cr Hr	0.1 CEU
Course #:	CIO004	N/A	5686	N/A	N/A
Subject Code:	N/A	N/A	5.5	N/A	N/A
Designation(s)	Health, Safety & Welfare and Sustainable Design	N/A	General Knowledge	Multiple	Multiple

Fees: \$10

(continued)

ARCHITECTS, BUILDERS, INTERIOR DESIGNERS, AND RELATED PROFESSIONALS

(continued)

CIO007 Lighting Control

Saturday: 10 a.m. – 11:30 a.m. (French); 1 p.m. – 2:30 p.m. (English)

Lighting control has become a standard in new home construction...people who have it love it and wonder how they ever lived without it! Participants will walk away from this course with a basic understanding of lighting control terminology and the benefits and solutions related to lighting control—presented in simple, easy to understand language. Additionally, attendees will be active participants in discussion surrounding common misconceptions and lighting control design considerations. This course will conclude with an informative checklist of questions to consider when interviewing and hiring an electronic systems contractor (ESC) for electronic systems integration in the home.

This course is recognized as providing “CORE Learning” credit to members of the Ontario Association of Architects (OAA) and the Architects' Association of New Brunswick (AANB). This course is recognized as providing “Self-Directed Learning” credit to members of the Order of Architects of Quebec (OAQ).

Association:	AIA	AIBD	IDCEC	NAHB	NARI
Credit:	1.0 LU	1.0 CEU	0.1 CEU	1.0 Cr Hr	0.1 CEU
Course #:	CIO007	N/A	5681	N/A	N/A
Subject Code:	N/A	N/A	5.1	N/A	N/A
Designation(s)	Health, Safety & Welfare and Sustainable Design	N/A	Health & Safety	Multiple	Multiple

Fees: \$10

CIO011 Hiding Technology

Saturday: 10 a.m. – 11:30 a.m. (English); 1 p.m. – 2:30 p.m. (French)

Home electronics should integrate seamlessly into a home's design and décor. This course reviews the three-pronged approach to hiding technology—advance planning, design philosophy, and product selection—which are available for minimizing the visual impact of electronics without compromising performance. Specific challenges and recommendations related to hiding video displays, projectors, speakers, controls, cameras, and equipment racks—among others—will be addressed. This course speaks to innovative and creative ways to lessen the visual impact of electronics by making them low-profile, hidden or camouflaged, or even invisible! Attendees will also walk away with an understanding of how to properly engage a trained electronic systems contractor (ESC) in their next project.

This course is recognized as providing “CORE Learning” credit to members of the Ontario Association of Architects (OAA) and the Architects' Association of New Brunswick (AANB). This course is recognized as providing “Self-Directed Learning” credit to members of the Order of Architects of Quebec (OAQ).

Association:	AIA	AIBD	IDCEC	NAHB	NARI
Credit:	1.0 LU	1.0 CEU	0.1 CEU	1.0 Cr Hr	0.1 CEU
Course #:	CIO011	N/A	5687	N/A	N/A
Subject Code:	N/A	N/A	2.1	N/A	N/A
Designation(s)	Health, Safety & Welfare and Sustainable Design	N/A	Health & Safety	Multiple	Multiple

Fees: \$10

Top 10 Technology Trends

Saturday: 10 a.m. – 11:30 a.m. (English)

With consumers rapidly increasing their expectations and their knowledge related to technology, design and build professionals must understand current technology trends. This course will highlight the top 10 technology trends and their future impact on the design and build community and prospective clients. Familiarity with new ideas and products, and the ability to converse about emerging concepts will be a direct benefit to attendees.

Fees: \$10

Registration Form

FIRST NAME: _____ LAST NAME: _____ COMPANY: _____

ADDRESS: _____ ADDRESS 2: _____

CITY: _____ PROVINCE/STATE: _____ POSTAL/ZIP CODE: _____ COUNTRY: _____

PHONE: _____ EMAIL: _____

To Register: Check the boxes next to the courses of your choice.

	Course Code	Course Title	Fees*	Language	Time
WEDNESDAY, MARCH 24	<input type="checkbox"/> EST200	Electronic Systems Technician Workshop	\$299	English	8 a.m. – 4 p.m.
	<input type="checkbox"/> EST208	Retrofit Installation	\$49	English	9 a.m. – 12 p.m.
	<input type="checkbox"/> EST313	Principles of IP Networking	\$49	English	2 p.m. – 5 p.m.
THURSDAY, MARCH 25	<input type="checkbox"/> EST251	Video Display Technology for Installers	\$49	English	10 a.m. – 1 p.m.
	<input type="checkbox"/> ESD211	Fundamentals of Distributed Audio Systems	\$49	English	10 a.m. – 1 p.m.
	<input type="checkbox"/> EST311	Video Set-up and Calibration	\$49	English	2 p.m. – 5 p.m.
	<input type="checkbox"/> ESD311	Advanced Distributed Audio	\$49	English	2 p.m. – 5 p.m.
FRIDAY, MARCH 26	<input type="checkbox"/> ESD026	Getting Into Green: Understanding LEED and Green Building Programs	\$29	English	11 a.m. – 12:30 p.m.
	<input type="checkbox"/> ESTII	Canadian EST II Exam	\$250 (Members) \$350 (Non-Members)	English/French	2 p.m. – 5 p.m.
	<input type="checkbox"/> ESTIII	Canadian EST III Exam Pre-Test Assessment	\$37 (Members) \$57 (Non-Members)	English/French	2 p.m. – 5 p.m.
SATURDAY, MARCH 27	<input type="checkbox"/> CIO300	Top Ten Technology Trends	\$10	English	10 a.m. – 11:30 a.m.
	<input type="checkbox"/> CIO011	Hiding Technology	\$10	English	10 a.m. – 11:30 a.m.
	<input type="checkbox"/> CIO004	Home Theater Design and Construction	\$10	French	10 a.m. – 11:30 a.m.
	<input type="checkbox"/> CIO007	Lighting Control	\$10	French	10 a.m. – 11:30 a.m.
	<input type="checkbox"/> CIO004	Home Theater Design and Construction	\$10	English	1 p.m. – 2:30 p.m.
	<input type="checkbox"/> CIO007	Lighting Control	\$10	English	1 p.m. – 2:30 p.m.
	<input type="checkbox"/> CIO011	Hiding Technology	\$10	French	1 p.m. – 2:30 p.m.

*All fees U.S. Dollars

TOTAL DUE: _____ METHOD OF PAYMENT American Express MasterCard Visa Check

CREDIT CARD NUMBER: _____ EXPIRATION DATE: _____

CARDHOLDER NAME: _____ SIGNATURE: _____

BILLING ADDRESS: _____

Fax completed form to 317.735.4067, email to registrar@cedia.org, or mail to 7150 Winton Drive, Suite 300, Indianapolis, IN 46268 USA. Questions? Call 317.328.4336 or 877.765.5559.