### NAEC Approved Continuing Education

The following courses/sessions have been reviewed and approved by the NAEC Education Committee for credit toward CET and/or CAT recertification. Please contact the listed provider for enrollment information. Symbols next to each course title indicate the delivery method.

	Text Based	Courses that are completed by reading or studying a book. Text-based courses have an exam which may be online.
<b>4</b>	Web / Computer Based	Courses that are completed online (including webinars) or delivered via CD ROM
eL	eLearning	Courses that are completed online and delivered via Peach system
<u> </u>	Seminar/Classroom	
	Article Based	Courses that are completed by reading or studying an article. Article-based courses have an exam which may be online.

NAEC: For enrollment information contact Kathy Bell at 800-900-6232 or visit www.naec.org

	Course Title	Contact Hrs	CET	CAT	Safety
	<b>DC Drives</b> Course based on <i>Electronic Variable Speed Drives (Delmar)</i> , 3 <sup>rd</sup> Edition, Chapters 1-8, by Michael Brumbach. (Book available through Elevator World)	4.00	Х		
	<b>AC Drives</b> Course based on <i>Electronic Variable Speed Drives (Delmar)</i> , 3 <sup>rd</sup> Edition, Chapters 10-15, by Michael Brumbach. (Book available through Elevator World)	4.50	X		
	<b>Device Review</b> Course based on <i>Electronic Variable Speed Drives (Delmar)</i> , 3 <sup>rd</sup> Edition, Appendix A-E, by Michael Brumbach. (Book available through Elevator World)	2.50	Х		
<b>\$</b>	EMS Freight Door Installation Installation guide provided by EMS Group. Online exam. CD ROM available through NAEC or EMS Group. EMS contact: 800-489-4889 or emsdoors.com	1.50	X		
<b>~</b>	Passenger Elevator Door Equipment – Chapters 1-2 Chapter 1: Door Types  Chapter 2: Preparation of Shaft & Clearances Inactive CD Rom available through NAEC – content provided by Columbia Elevator Products & GAL Manufacturing. Exam online.	1.00	Х		
<b></b>	<ul> <li>Passenger Elevator Door Equipment – Chapters 3-4</li> <li>Chapter 3: Installation of Sliding Passenger Elevator Entrances</li> <li>Chapter 4: Hoistway Equipment</li> <li>Inactive CD Rom available through NAEC – content provided by Columbia Elevator Products &amp; GAL Manufacturing. Exam online.</li> </ul>	1.50	X		
<b>\$</b>	Passenger Elevator Door Equipment – Chapters 5-6	1.50	X		
eL	2 Way Communication and Applicable Code Kings III	1.50	Х	Х	
eL	A17.1/B44 Maintenance Control Program Elevator Safety Solutions, LLC	1.00	Х		
eL	Addressing the Most Common Questions Related to Retrofit Code Electrodyn	1.50	Х		
eL	ALP Elevator Wire Rope Seminar ALP Industries, Inc.	1.50	Х	Х	
eL	ASME A17.4 – Guide for Emergency Personnel Elevator Safety & Technical Services	1.00	Х	Х	
eL	Avoiding Trouble with Retrofit Drive Installations  Magnetek	1.00	Х	Х	

	Course Title	Contact Hrs	CET	CAT	Safety
eL	Coated Traction Ropes Brugg Wire Ropes	1.00	Х	Х	
eL	Comparing Layout, Setup, & Adjustments of GALaxy III to GALaxy IV GAL, Mfg.	1.00	Х		
eL	Control Valves EECO	1.00	Х	Х	
eL	Creating Code Compliant Maintenance Control Programs Vertical Assistance	1.00	Х		
eL	Customizing Vertical Platform Lifts Handilift	1.00	Х	Х	
eL	<b>Debunking Myth of Elevator Energy</b> James W Bos, LLC	1.00	X		
eL	Door Operators Columbia Elevator Products	1.00	X	X	
eL	Door Re-Opening Code & Safety Training SCS Elevator Products	0.50	X		
eL	EECO Hydraulic Control Valve Training Elevator Equipment Corp.	1.00	Х	X	
eL	Electrical Motor Repair - MOD Coupler Installation Demo Electrical Motor Repair Co	0.50	X		
eL	Electrical Safety Magnetek	1.00			Х
eL	Elevator & Escalator Inspection/Testing Techniques Swett Corp.	1.00	Х		
eL	Elevator Lighting/Ceiling Materials  ECI	0.50	X	X	
eL	ELVI Testing without Weights Wurtec	1.00	X		
eL	Employee Improvement Program Impacts Products, Customer Service & Profits MEI	0.50	Х		
eL	Fall Protection D-C Elevator/Delaware Elevator	1.00			X
eL	Fiber Optic Cables Draka Elevator Products	1.00	X		
eL	Hand & Power Tool Safety Hub International	0.50			Х
eL	How to Adjust Rope Tension & Shackles  Draka	1.00	Х	X	
eL	Improving Hydraulic Elevator Performance with a Leveling System Upgrade Vertitron	0.50	Х		
eL	Introducing & Installing the Rope Gripper and Various Training Procedures Hollister-Whitney	1.00	Х		
eL	Job Hazard Assessment – a Plan for Work Safety Vertical Assessment Associates	1.00			Х
eL	Lightweight Stone Panel Systems for Elevators Stoneworks of Art	1.00	Х	Х	
eL	Load & Temperature Compensation Method for Green Hydraulic Lifts by Means of Inverters Blain Hydraulic	1.00	Х	X	
eL	Lubrication & Elevator Ropes Brugg Wire Rope	1.00	Х	Х	1
eL	Material & Technology in Elevator Cab Interiors SnapCab	1.00	Х		†
eL	Mechanical & Electrical Adjustment of MOVFR Door Operators GAL, Mfg.	0.50	Х		1
eL	Moisture Means Death for Hoist Ropes Brugg Lifting	1.50	Х	Х	

	Course Title	Contact Hrs	CET	CAT	Safety
eL	MRL Market	1.00	Х		
-1	Alliance Elevator Solutions  MRL vs. Overhead Traction	1.00	X	X	
eL	Motion Control Engineering	1.00	^	^	
eL	One; Three; & Five Year Tests of A18.1 Equipment Vertical Assessments	1.00	Х	Х	
eL	Platform Lift Design: Top 10 Code Issues  Handi-Lift	1.00	Х	Х	
eL	Principles of ITI Inground Telescopic Cylinder ITI Hydraulik	0.50	X	X	
eL	Running Clearances 101 Integrity Elevator	1.00	Х	X	
eL	Safe Elevator Operation with Serial I/O Virginia Controls	1.00	Х		
eL	Sealing Management for Hydraulic Cylinders The Texacone Co	1.00	Х	X	
eL	Suspension Rope Dynamics Wurtec	1.00	Х	X	
eL	Technology, Functionally & Operations of the Controller Line – Element Traction™ & Element Hydro™  Motion Control Engineering	1.00	X		
eL	The 5 Step Guide to the 70 Hour Hydraulic Installation Alliance Elevator Solutions	1.00	X		
eL	The Evolution of Elevator Control Systems Elevator Control Corp.	1.00	Х		
eL	The Fan Club Man-D-Tec	1.00	Х	Х	
eL	The World is Flat ETP vs. ETT Traveling Cables  Turtle & Hughes	1.00	Х	Х	
eL	Use of False Cars for Rail Installation  Wurtec	0.50	Х		
eL	Vertical Wheelchair Lifts & Limited Uses/Limited Application Elevator Service Co Inc.	1.00	Х	Х	
eL	Watts Up with Cab Lighting Man-D-Tec	1.00	Х	Х	
eL	What's New with Seismic Requirements What are the Requirements to Control Unintended Motion Draka Elevator	0.50	Х	Х	
	NAEC Articles Read the article & complete the quiz at the end of article or complete the	e test online	<del>)</del> .	1	•
	False Car (March 2013)	1.00			X
	Course Title	Contact Hrs	CET	CAT	Safety
2	NAEC Spring Conference 2019			1	•
Resemble.	April 14-17, 2019, Naples, FL - Sessions approved are as follows:  > Revisiting Residential & Commercial Stairway Lift Standards	4.00			1
	<ul> <li>Revisiting Residential &amp; Commercial Stairway Lift Standards</li> <li>Coated Traction Products- A Milestone in Elevator Rope Technology</li> </ul>	1.00	X	X	
	"A New Code Requirement for Door Equipment"	1.50	X	X	1
	Elevator Safety Instruction	2.00		<del>  ^</del>	X
	OSHA Alliance and Best Practices (roundtable)	1.00	1		X
	> Through Floor Lifts (roundtable)	1.00	Х	X	1
	<ul> <li>Working with AC Drives on Various Elevator Systems (roundtable)</li> </ul>	1.00	X	X	1
2	NAEC Fall Convention 2019	•	•	•	•
	September 16-19, 2019, Grand Rapids, MI - Sessions approved are as follows:	Т .	1		1
	> The Advantage of a Complete Control System Package	1.00	X		1
	> Drilling Hydraulic Holes for Consequence: Problems and Solutions > Sotting Up a Safety Program from a Safety Expert (Poundtable)	1.00	X		\ \ \ \ \
	<ul> <li>Setting Up a Safety Program from a Safety Expert (Roundtable)</li> <li>DC Gearless Maintenance and Troubleshooting Procedures (Roundtable)</li> </ul>	1.00	X		X
	> DO Ocanicos maintenance and Housiconouning Frocedures (Noundtable)	1.00	_ ^		

Course -	Гitle	Contact Hrs	CET	CAT	Safety
~	Private Residence Elevator Maintenance and Applicable A17.3 Sections	1.00	Х	Х	
>	Key Changes in the 2019 ASME A17.1/CSA B44 Safety Code for Elevators and Escalators	1.00	Х	Х	
>	Data Communication Options for Elevator Cabs	1.00	Х	Х	
>	Code Required Maintenance & Replacements	1.00	Х		
>	Elevator Machine Guarding: Mitigate the Risk	1.00	Х	Х	
>	IoT and Sensor-Based Elevator Monitoring	1.00	Х	Х	
>	Vertical Material Handling Systems & Methods (AIA Approved)	1.00	Х	Х	
~	Elevator Door Safety: Light Curtains	1.00	Х	Х	
<b>A</b>	IBC Emergency Communications - ASME A17.1 Code Changes and How This May Significantly Impact Mechanics, Contractors and Buildings	1.00	Х	Х	

# **ALP Industries Inc:** For more information, contact Edward W Hamilton ewhamilton@alpindustries.com.

Course Title	Contact Hrs	CET	CAT	Safety
ALP Elevator Wire Rope Seminar This is course will discuss the components of wire rope including construction, grades and	1.50	Х		
cores, the types of wire rope sheaves, factors that affect service life of wire ropes and the inspection of wire rope.				

#### American Heart Association: Visit www.heart.org for information about the Workplace Training.

	Course Title	Contact Hrs	CET	CAT	Safety
2	HeartSaver CPR The Heartsaver CPR Course teaches CPR and relief of choking in adults and children, and infant CPR and relief of choking, and use of barrier devices for all ages.	3.00			Х
2	HeartSaver AED The Heartsaver CPR Course teaches skills such as giving CPR to an infant, child or an adult and using an AED.	3.00			Х
2	HeartSaver First Aid The Heartsaver First Aid Course is designed to meet OSHA regulations and teach basic first aid skills such as stopping bleeding that can be seen.	3.00			Х
2	HeartSaver First Aid with CPR/AED  Topics include First Aid Basics, Medical Emergencies, Injury Emergencies and Environmental Emergencies.	3.00			Х

### American Red Cross: Information about Workplace Training is available at www.redcross.org

	Course Title	Contact Hrs	CET	CAT	Safety
<u> </u>	CPR - Adult  Participants learn how to perform CPR and manage breathing and cardiac emergencies in adults. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	3.50			Х
<b>~</b>	Standard First Aid  Participants learn first aid skills to treat a variety of injuries such as burns; head, neck and back injuries; and heat and cold related emergencies. Participants also learn to manage sudden illnesses, stroke, seizures, bites and poisoning. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	3.75			Х
<u> </u>	CPR/AED – Adult  Participants learn adult CPR and AED skills to respond to breathing and cardiac emergencies. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	4.50			Х
<u> </u>	Standard First Aid with CPR - Adult Provides first aid and adult CPR training and explains the role of AEDs in emergency cardiac care. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	5.50			Х
<u> </u>	Standard First Aid with CPR/AED - Adult  American Red Cross' most comprehensive training course for employees, this session provides training in first aid, adult CPR and AED skills. (PLEASE NOTE: A maximum of 3	6.50			Х

contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be		
applied towards renewal )		

Bailey Safety: For more information, contact Nancy Bailey (nancyb@baileysafety.com).

	Course Title	Contact Hrs	CET	CAT	Safety
	Advanced Fall Protection	3.00			X
<u>a</u>	<b>First Aid/CPR/AED/ BBP (PLEASE NOTE:</b> A maximum of 3 contact hrs in safety will be accepted. All safety hours in excess of the maximum will not be applied towards renewal.)	5.50			Х
<u> </u>	<b>OSHA 10</b> (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	10.00			Х

# **Bella Elevator LLC:** For more information, contact Michael Wettstein (mwettstein@bellaelevator.com) at 309-689-8090.

	Course Title	Contact Hrs	CET	CAT	Safety
<b>a</b>	LULA Basic Installation 1.0  This course is to train installation of Bella's LULA Elevators. Course topics include installation, troubleshooting, basic electrical, hydraulic adjustments and service.	8.00	Х	Х	
<u>a</u>	Vertical Platform Lift Installation and Troubleshooting  This course is to train installation, service and troubleshooting of Bella's Vertical Platform Lifts (VPL). Course topics include safety, code compliance, installation, trouble shooting, basic electrical and service. Classroom and hands on installation, wiring, trouble shooting and operation of demonstration will be included.	14.00	Х	Х	

### **DC Elevator:** For more information, contact Chuck Sharp (chuck.sharp@dcelevator.com)

	Course Title	Contact Hrs	CET	CAT	Safety
:)	Confined Spaces Training	2.00			Χ
	This course is intended to learn the proper use of monitors including bump test and				
	calibration as well as to review Lockout Tagout and pit entry procedures.				

### Delaware Elevator: For more information, contact David Smarte at dsmarte@delawareelevator.com.

	Course Title	Contact Hrs	CET	CAT	Safety
<u> </u>	Entrance/GAL	8.00	Х	Х	
	Installing False Car Systems	8.00	Х		
2	Medic Basic First Aid (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	8.50			Х
	OSHA - 10 (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	10.00			Х
	OSHA 30 (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	30.00			Х
	OSHA Mandated MSDS to SDS	2.00			Х
	<b>OSHA Review</b> (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	7.00			Х
	2017 OSHA Update/Silica Safety Training	2.00			Х
	<b>Rigging</b> This course cover properly calculate working loads, utilize different configurations of lifting equipment, properly access site safety and inspection means.	4.00	Х		

> 1st Day of Training (Group 1/Day 1 & Group 2/Day 2)	7.50	Х		
➤ 2 <sup>nd</sup> Day of Training (Group 1/Day 3 & Group 2/Day 9)	7.50	Х		
➤ 3 <sup>rd</sup> Day of Training (Group 1/Day 4 & Group 2/Day 8)	VARIED	X	Χ	
		7.50	5.75	
> 4th Day of Training (Group 1/Day 5 & Group 2/Day 10)	7.50	Х		
> 5th Day of Training (Group 1/Day 6 & Group 2/Day 7)	7.50	Х		

### Draka Elevator Products For more information, contact Kyle Hendren at

kyle.hendren@prysmiangroup.com

	Course Title	Contact Hrs	CET	CAT	Safety
$\Box$	Technical Education and Solutions for Elevator Installation,	8.00	Χ	Χ	Χ
	Maintenance, Safety/Inspection and Upgrades		7.00	1.50	1.00
Ω	Technical Education and Solutions for Elevator Installation,	4.00	Х		
	Maintenance, Safety/Inspection and Upgrades				

#### **Eastern Elevator Service**

Course Title	Contact Hrs	CET	CAT	Safety
Safety Training	1.00			X
OSHA 10 Hour Outreach Training  (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	10.00			X

## Elevator & Vertical Transportation Educational Assoc: For more information, contact

Bradley D. Fox at 517-974-8704 or fsqei@att.net.

	Course Title	Contact Hrs	CET	CAT	Safety
$\Box$	EVETA 2018-2019 Elevator Code and Safety Review Seminar	10.00	8.00	8.00	2.00
	·		Χ	Χ	X

# **Elevator Controls Corp:** For more information, contact Francisco Ortiz at 916-482-1708 or Francisco.Ortiz@elevatorcontrols.com.

	Course Title	Contact Hrs	CET	CAT	Safety
<b>•</b>	EC Factory Technical Training Elevator Controls Corporation Technical Training Seminar is designed to provide helpful tips and training for both basic and advanced troubleshooting and adjustment procedures on ECC Controller, the use of on board diagnostics for error isolation and microprocessor reprogramming, outlines equipment, integration and the pitfalls to avoid between drives, motors, and how to select compatible systems to eliminate installation and maintenance headaches. Details classroom lectures backed up with vital "hands on" instruction will give you the "instant recall", when it comes to the "real thing". Live "EC Controllers" provided on site for demonstration as well as practice. You will be joining other qualified elevator personnel for two days of intensive Factory Technical Training at Elevator Controls Sacramento California headquarters.	16.00	X		
	EC Factory Technical Training – Pixel Control System	16.00	X		
	Pixel control systems		8.00 hrs		
	Pixel motor drive unit applications and adjustment for elevator performance		8.00 hrs		

# **Elevator Safety and Technical Services (ESTS):** For more information, contact Lee Rigby at 866-896-0401.

	Course Title	Contact Hrs	CET	CAT	Safety
<u>a</u>	CET Continuing Education Workshop 2019  This eight-hour basic course is to provide continuing education for certified elevator inspectors, which will include the following:	8.00	Х		

	Course Title	Contact Hrs	CET	CAT	Safety
	<ul> <li>Update on current local Statutes and Administrative Codes governing elevators.</li> <li>Overview of all eight ASME A17 Codes for Elevators and Escalators.</li> <li>Review of 2017 Florida Building Code and 2015 IBC - changes to Elevator requirements.</li> <li>PowerPoint presentation on the Appendixes to ASME A17.1, 2016 Edition</li> <li>Presentation on changes in ASME A17.1, 2016 Edition</li> </ul>				
<u>~</u>	Elevator Safety Instruction – 2019  The course will be based on gaining familiarity with the working around moving and electrical equipment based on guidelines in the Elevator Industry Field Employees' Safety Handbook (EIFESH), 2015 Edition, Section 12. Reported accidents and incidents involving elevator technicians will be pointed out to make the point.	2.00			Х
<b>~</b>	<ul> <li>CET Continuing Education Workshop 2018</li> <li>This eight-hour basic course is to provide continuing education for certified elevator inspectors, which will include the following:</li> <li>Update on current local Statutes and Administrative Codes governing elevators.</li> <li>Overview of all eight ASME A17 Codes for Elevators and Escalators.</li> <li>Review of 2017 IBC and Florida Building Codes - changes to Elevator requirements.</li> <li>PowerPoint presentation on the evolution of door protective devices</li> <li>Presentation on changes to A17.1.</li> </ul>	8.00	X	X	
<b>a</b>	CET Continuing Education Workshop 2018 – Session I  This four-hour basic course is to provide continuing education for certified elevator inspectors, which will include the following:  • Update on current local Statutes and Administrative Codes governing elevators.  • Overview of all eight ASME A17 Codes for Elevators and Escalators.  • Review of 2017 IBC and Florida Building Codes - changes to Elevator requirements.  • PowerPoint presentation on the evolution of door protective devices.  • Presentation on changes to A17.1.	4.00	X		
<b>~</b>	CET Continuing Education Workshop 2018 – Session II  This four-hour basic course is to provide continuing education for certified elevator inspectors, which will include the following:  • Update on current local Statutes and Administrative Codes governing elevators.  • Overview of all eight ASME A17 Codes for Elevators and Escalators.  • Review of 2017 IBC and Florida Building Codes - changes to Elevator requirements.  • PowerPoint presentation on the evolution of door protective devices.  • Presentation on changes to A17.1.	4.00	Х		
<u>a</u>	Elevator Safety Instruction – 2018  The course will be based on the Elevator Industry Field Employees' Safety Handbook (EIFESH), Sections 10 and 11, as a continuation of a series that started with Section 1. The presentation will show each Item within these two sections, along with photographs and OSHA information.	2.00			X

**Elevator U:** For more information visit www.elevatoru.org

	Course Title	Contact Hrs	CET	CAT	Safety
<b>~</b>	<ul> <li>2019 Annual Conference June 18<sup>th</sup>-20<sup>th</sup>, 2019</li> <li>Elevator Research at American Universities 1890 - 2000</li> <li>Elevator Selection for Low-Rise Buildings</li> <li>Working with AC Drives on Various Elevators</li> <li>Job Hazzard Analysis/Personal Safety to Live By</li> <li>Elevator Door Protection 2019</li> <li>Effects of Improperly Maintained Hydraulic Oils in Elevator Components</li> </ul>	10.50	7.50 X	7.50 X	

### **Elevator World:** For enrollment information call 800-730-5093 or visit www.elevator-world.com

	Course Title	Contact Hrs	CET	CAT	Safety
♣	Maintenance Control Program and MRL Inspections	1.50	Χ		
Ū	CD-Rom based on the Maintenance on New Equipment Designs book will focus on				
	The difference involved in working safely on legacy equipment vs. MRLs				
	Elevator equipment code compliance				
	Maintenance of elevator components				
	Development and maintenance of current Maintenance Records				

	Course Title	Contact Hrs	CET	CAT	Safety
	<ul> <li>Providing wiring diagrams</li> <li>Implementation of monthly Fire Service Tests</li> </ul>				
<b>4</b>	Rope Dynamics  CD-Rom that will focus on the effect of elevator hoist rope vibration on elevator ride quality and how there phenomena can be mitigated. The engineering principles and calculations used to determine where in the course of an elevator trip the rope vibration will have an adverse effect on the elevator ride quality and means to minimize and/or eliminate this effect will be presented.	1.00	Х	Х	
<u>~</u>	Rope Traction: Theory & Practice  DVD course that combines both a live speaker and a Power Point program developed by George Gibson.	3.00	Х	Х	
	Elevator Field Safety Exam #1 Course based on The 2010 Elevator Industry Field Employee's Safety Handbook, 1-4.	1.00			Х
	Elevator Field Safety Exam #2 Course based on The 2010 Elevator Industry Field Employee's Safety Handbook, 5-7.	1.00			Х
Ш	Elevator Field Safety Exam #3 Course based on The 2010 Elevator Industry Field Employee's Safety Handbook, 8-11.	1.00			Х
	Elevator Field Safety Exam #4 Course based on The 2010 Elevator Industry Field Employee's Safety Handbook, 12-21.	1.00			X
	The Maintenance Series Courses based on the Elevator Maintenance Manual by Za	ck McCain			
	Escalator Maintenance (Chpt 5)	1.50	X		
	General Elevator Maintenance (Chpt 2)	4.50	Х	Х	
	Hydraulic Elevator Maintenance (Chpt 4)	2.00	X	X	1
	Traction Elevator Maintenance (Chpt 3)	3.50	X		
_	Elevator World Articles Read the article & complete the quiz at the end of article or			lino	
		1			
	Traction Elevator Control Mandates (August 2019)	1.00	X	X	
	Understanding Problems of Suspension Means (July 2019)	1.00	X	X	
	Elevator Motor and VFD Diagnosis (June 2019)	1.00	Χ	Х	
	Motor Drive and Control (March 2019)	1.00	Х	X	
	Instruments for Elevator Debugging and Diagnosis (February 2019)	1.00	X		
	NEC Requirements for Electric Motor Installations (August 2018)	1.00	X	X	
	A17/B44 Type B Safety Stopping, Part Two- Performance in Free Fall (July 2018)	2.00	Х		
	Carriage Gates (June 2018)	1.00	Х	Х	
	Maintaining and Adjusting Variable-Torque Brake Controls (May 2018)	1.00	Х		
	A17/B44 Type B Safety Stopping, Part One (April 2018)	2.00	X		
	Traction Elevators (February 2018)	1.00	X	Х	
	Rectification (December 2017)	1.00	X	X	
	Traction for Field Personnel, Part One (August 2017)	1.00	X	X	
	CAN Bus for Elevators (June 2017)	1.00	X	X	+
	Troubleshooting Elevators (April 2017)	1.00	X	X	
	Full-Cab A18.1/B355 Lifts (Feb 2017)	1.00	X	X	
	,	1	X		
	Thoughts on Escalator & Moving Walk Maintenance (Dec 2016)	1.00		- V	
	Reading Electronic Schematics (Nov 2016)	1.00	X	X	1
	Making Hydraulic Elevators Heat Resilient (Sept 2016)	1.00	X	X	
	Oscilloscopes Part Two (June 2016)	1.00	X	X	
	Oscilloscopes Part One (May 2016)	1.00	X	X	
	Servicing of Hydraulic Elevators After Flooding (April 2016)	1.00	Х	X	
	Maintenance Control Program Changes (March 2016)	1.00	X		
	Digital & Analog Troubleshooting (February 2016)	1.00	Х		
	Elevator Door Force (November 2015)	2.00	Х		
	Working with JFETs (October 2015)	1.00	Х	Х	
	Motor Controllers (August 2015)	1.00	Х	Х	
	Occupant Evacuation Elevators (July 2015)	1.00	X	1	
	Lubrication & Elevator Ropes (June 2015)	1.00	X	X	

Course Title	Contact Hrs	CET	CAT	Safety
Elevator Hoistway Doors (April 2015)	1.00	Х	Х	
Integrated Circuits (March 2015)	1.00	Х	Х	
Voltage Saps (Dips) (February 2015)	1.00	Х	Х	
What is a Transistor? (December 2014)	1.00	Х		
MOSFETs (October 2014)	1.00	Х	X	
Hidden Details of Modernization (September 2014)	1.00	Х		
What is a Diode? (August 2014)	1.00	Х	Х	
False Car (June 2014)	1.00	Х		
Common Misconceptions Regarding Elevator Traffic Simulations (April 2014)	1.00	Х		
Telescopic Jacks (Dec 2013)	1.00	Х		
Metal Raceways in Elevator Work (Aug 2013)	1.00	X		
Energy-Efficient VVVF Hydraulic Lift Drive (June 2013)	1.00	X		
Maintaining Elevators & Escalators in the Transit Environment (April 2013)	1.00	X		
Wet Ropes Equal Dead Ropes (Mar 2013)	1.00	X		
Elevator Motors for Elevators (Feb 2013)	1.00	X		
Maintaining Elevators & Escalators in the Transit Environment (Dec 2012)	1.00	X		
		X	-	
AECO Certification as Applied to a Wind-Turbine Tower Elevator (Oct 2012)	1.00			
LU/LA Elevators (August 2012)	1.00	X		
Constructional Stretch & Hoist-Rope Tension (July 2012)	1.00	X	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
NEC Article 620: Elevators Part 2 (June 2012)	1.00	X	X	
NEC Article 620: Elevators Part 1 (April 2012)	1.00	Х	X	
Freight Elevator Door Control (Feb 2012)	1.00	Х		
Elevator Drives, Power Quality and Energy Savings (Dec 2011)	1.00	X		
Variable-Frequency Drive Systems for Hydraulic Elevators (Oct 2011)	1.00	Х		
Hydraulic Elevators – Configuring the Power Unit, Part II (Sept 2011)	1.00	Х		
Rope Dynamics (May 2011)	2.00	X		
The Conflicting Roles of the Elevator Safety Code, LEED and ADA in Elevator Renovation (May 2011)	1.00	Х		
Electrically Assisted Braking Using DC Hoist Motors (Feb 2011)	2.00	Х	Х	
The Application of Electromechanical Spring-Set Brakes in MRL Machines (Jan 2011)	1.00	X	X	
Hydraulic Elevators - Configuring the Power Unit (Dec 2010)	1.00	X	X	
Hydraulic Elevators: Importance of Oil Cleanliness (Nov 2010)	1.00	X	X	
Safety and Buffer Testing without Weights (Sept 2010)	2.00	X	X	
Elevator System with Multiple Cars in One Hoistway (Aug 2010)	2.00	X		
Regenerative Elevator Drives: What, How and Why (June 2010)	1.00	X	+	
Maintenance Control Program (May 2010)	2.00	X	1	1
Modern VVVF Drives (Feb 2010)	1.00	X	X	
		X	<del>  ^</del>	
KEB F5 Elevator Drives: Startup, Adjust. & Troubleshooting PM Applications (Dec 2009)	2.00	X	\ \ \	
Introduction to Permanent-Magnet Gearless Motors and Drive Control Systems (Nov 2009)	1.00		X	
Steel Wire Ropes for Tractions Elevators, Part 3 (Sept 2009)	1.00	X	X	
Steel Wire Ropes for Tractions Elevators, Part 2 (July 2009)	1.00	X	X	
Steel Wire Ropes for Tractions Elevators, Part 1 (May 2009)	1.00	X	X	
Elevator Hoistway Equipment: Mechanical & Structural Design, Part 2 (Feb 2009)	2.00	X	X	1
Improving Elevator Performance by Monitoring Elevator Cab Volume (Nov 2008)	1.00	X		
Elevator Hoistway Equipment: Mechanical & Structural Design, Part 1 (Sept 2008)	2.00	Х	X	
Round Traveling Cable Installation and Compensating Cable with a Wider Loop for Improved Balance (June 2008)	1.00	Х	X	
Understanding Traction Hoist Ropes in Today's Elevator Installation (April 2008)	1.00	Х	Х	
Installation and Operation of the Reynolds & Reynolds UVR Powervator® (Feb 2008)	1.00	X	X	
The Perfect Drive" & "Get the Lead Out! (Dec 2007)	1.00	X		
Improving Motor Efficiency in Constant Speed Applications (Oct 2007)	1.00	X	X	
Elevator Hoisting: Maximizing Performance of Ropes in Existing and "Improved" High				
Demand-Installations (Aug 2007)	1.00	Х	X	

	Course Title	Contact Hrs	CET	CAT	Safety
	Replacing Motor-Generator Sets with Modern Static DC Drives (June 2007)	1.00	Х		
	Variable Voltage Made Easy Using Print No. C-1469-A (April 2007)	3.00	Х		
	Installation and Adjustment of the Hollister-Whitney Rope Gripper™ (Feb 2007)	1.00	Х		
	North American Code & Standards	1.00	Х		
	Maintenance on New Equipment Designs Course Series Is based on the Maintenance on New Equipment Designs book by John Koshak. The indepth guide is designed for the service technician coming in contact with a wide range of new designs of elevator equipment including: Machine-room-less elevators, permanent magnet traction machines, friction governors, MRL blocking devices and much more. In addition, Koshak explains requirements of the Maintenance Control Program, codified in ASME A17.1, with steps that need to be taken in order to maintain compliance.	9.00	X		
	Educational Focus – Volume 1			1 1/	1
	Chapter 1: Elevator Controllers	2.00	X	X	
	Chapter 2 – Elevator Door Operators	2.00	Х	X	
	Chapter 3 – Hydraulic Elevators	1.00	Х	X	1
	Chapter 4 – Dispatching Systems	1.00	Х		1
	Chapter 5 – Elevator Drive Systems & Chapter 12 – Elevator Communication	3.00	Х	X	
	Chapter 6 – Door Protection Systems	1.00	X		
	Chapter 7 – Elevator Guide Rails	1.00	X	X	
	Chapter 8 – Elevator Safeties and Governors	1.00	Х	Х	
	Chapter 9 – Elevator Car Enclosures	1.00	Х	X	
	Chapter 10 – Elevator Hoisting Machines	1.00	Х	Х	
	Chapter 11 – Escalators	1.00	Х		
	Chapter 14 – Elevator Suspension Systems	3.00	Х	Х	
	Chapter 15 – Testing Equipment	1.00	Х		
	Chapter 16 – Elevator Entrances	1.00	Х	Х	
	Chapter 18 – Freight Elevator Doors	1.00	Х		
	Educational Focus – Volume 2				-U
יע	Section 2.1 Chapters 1-3	3.00	Х	X	
	Section 2.1 Chapters 4-7	3.00	Х	Х	
	Section 2.2 Chapters 1-2	2.00	Х	X	
	Section 2.2 Chapters 3-5	2.00	X	X	
	Section 2.2 Chapters 6-7	2.00	X	X	
	Section 2.3 Chapters 1-3	2.00	X	X	
	Section 2.4 Chapter 1	2.00	X	X	
	Section 2.4 Chapters 2-3	3.00	X	X	
	Educational Focus – Volume 3	. 0.00		1	1
	Section 3.1 Chapters 1-2	2.00	Х		
	Section 3.1 Chapters 3-4	2.00	X	1	†
	Section 3.2 Chapters 1-4	2.00	X	Х	†
	Section 3.2 Chapters 5-6	1.00	X	X	
	Section 3.3 Chapters 1-2	2.00	X	X	
	Section 3.3 Chapters 3-4	2.00	X	X	
	Section 3.3 Chapters 5-6	2.00	X	X	
	Section 3.4 Chapters 1-4	3.00	X	X	+
	Field Employee's Testing Manual	3.00	X	X	
	This course is based on the book, Field Employees' Elevator Testing Manual, 3rd Edition and is a self-study course with a timed online exam.	3.00			

### Envirosafety Confined Space Safety Equipment Inc: For more information, contact Lilian

Yan at lyan@enrifosafety.ca.

	Course Title	Contact Hrs	CET	CAT	Safety
<u> </u>	Fall Protection  This course is intended for any person that will be required to work at a height or where fall protection is necessary as per WorksafeBC Regulation, Part 11. This course combines both theory and practical training using current, approved fall protection equipment. The training includes instruction, demonstration hands-on and written exercises. Participants will use fall protection equipment, setup and work off of lifeline systems, and perform self-rescue from vertical lifelines. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the max will not be applied towards renewal)	7.00			Х

#### ES Controls, LLC: For more information, contact Eric Appana at eric.appana@escontrolsllc.com

	Course Title	Contact Hrs	CET	CAT	Safety
<u> </u>	Computer Networking in the Elevator Industry  This course is designed to help maintenance mechanics, adjustors, supervisors who need	6.00	Х	Х	
	to create/troubleshoot Ethernet networks in the elevator industry.				
<u>=</u>	Maintaining the SWIFT FUTURA (Generation One) Controller  This course is designed to help maintenance mechanics, adjustors, supervisors install maintain the SWIFT FUTURA Generation One controller. This course will apply to the Traction and Hydro product lines.	7.00	X		
2	Performing CAT Testing on the SWIFT FUTURA GENERATION ONE This course is designed to help maintenance mechanics, adjustors, supervisors perform Cat Testing on the SWIFT FUTURA Generation One controller. This course will apply to the Traction and Hydro product lines.	6.00	X		
<u>a</u>	Using an Oscilloscope on Elevators  This course is designed to help maintenance mechanics, adjustors, supervisors use an oscilloscope to troubleshoot an elevator.	6.00	Х	Х	

### **EVETA:** For more information, contact Bradly Fox at fsqei@att.net

	Course Title	Contact Hrs	CET	CAT	Safety
$\Box$	EVETA 2018-2019 Elevator Code and Safety Seminar	10.00	8.00	8.00	2.00
			Χ	Χ	Χ

### Fire Protection Education: For more information please visit the FPE Website at:

www.FireProtectionEducation.com.

	Course Title	Contact Hrs	CET	CAT	Safety
<u>a</u>	Interfacing Elevator Controls with Fire Alarm & Sprinkler System This class will discuss and clarify specific NFPA 72 (National Fire Alarm and Signaling Code) and NFPA 13 (Standard for the Installation of Sprinkler Systems) requirements associated with these elevators, both in buildings provided with "Building Fire Alarm Systems" and those without Specific NFPA 72, NFPA 13 and ASME A 17.1 code terms, such as Dedicated Function FA System for Elevator Recall and Supervisory, Phase-I Emergency Recall Operation, Phase-II In-Car Emergency Operation, Designated and Alternate Recall levels and Shunt-Trip Function will be discussed and clarified.	7.50	X		
•	New Code Requirement for Fire Service Access Elevators (FSAE) & Occupant Evacuation Elevators (OEE)  In high-rise buildings, elevators are extremely useful tools for firefighters to fight fires and rescue occupants. The main reason for developing the Fire Service Access Elevator (FSAE) was to provide firefighters with a safer and more efficient means to fight fires and rescue occupants in the upper floors of high-rise buildings. The FSAE was first required by the 2009-IBC for high-rise buildings over 120 feet in height. Occupant Evacuation Elevators were also introduced first in the 2009-IBC as an exception to the required third exit stairway for buildings over 420 feet in height The OEE are intended to be used by building occupants to evacuate the building during fire emergencies. This class will discuss the specific code requirements for the FSAE and OEE including the IBC/CBC codes and NFPA standards from the AHJ/Enforcing Agency perspective.	7.50	X		

### GAL Manufacturing Corp: For more information contact Peter Novak at peter@gal.com

	Course Title	Contact Hrs	CET	CAT	Safety
$\Box$	Adjusting/Troubleshooting GALaxy Controllers	8.00	Х		
	Through discussion, lecture and practice, participants will focus on the installation, adjustment and troubleshooting of GALaxy Controllers.				
$\Box$	Installation Procedures for GAL Door Equipment	1.50	Х	X	
	Attendees will be presented with a thorough overview of the installation process for GAL Door Equipment.				
$\Box$	Understanding/Adjusting/Troubleshooting GALaxy Controllers	1.50	Х		
	Attendees will be presented with a thorough overview of issues surrounding installation				
	and adjustment of GALaxy Controls.				

## **Garaventa Canada, Ltd:** For more information contact James Begg at 604-594-0422 x. 1284 or iames.begg@garaventalift.com

anne	s.begg@garaveritaliit.com				
	Course Title	Contact Hrs	CET	CAT	Safety
2	Artira, Level III Technical Training One-day seminar related to the installation, service and maintenance of Garaventa Artira lifts	8.0	Х	Х	
<u>a</u>	Elvoron MR, Level III Technical Training One and half day seminar related to the installation, service and maintenance of Garaventa Elvoron MR lifts	11.5		Х	
	Genesis/OPAL, Level III Technical Training One-day seminar related to the installation, service and maintenance of Garaventa Genesis and Genesis OPAL lifts	8.0	Х	Х	
<u>a</u>	Xpress II, Level III Technical Training One-day seminar related to the installation, service and maintenance of Garaventa Xpress II lifts	8.0	X	Х	

# **HB Training & Consulting (HBTC), LLC:** For more information, contact Kevin Madison at kmadison@hbnext.com or 770-619-1669.

	Course Title	Contact Hrs	CET	CAT	Safety
<b>&amp;</b>	Confined Space in Construction Competent Person Class  This 8 hour course is designed to meet your supervisors, foremen, estimators, and workers needs in confined space safety and the applicable OSHA standards. Introduction to OSHA ~ Review 29CFR Part 1910.134 ~ Review 29CFR Part 1910.146 ~ Review 29CFR Part 1910.147 ~ Review required PPE ~ Define the Confined Space "Team" ~ Review Confined Space "Team" Responsibility ~ Discuss Hazardous Atmospheres. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the max will not be applied towards renewal)	7.50			X
<b>~</b>	Fall Protection Competent Person Class  This 8 hour course is designed to meet your supervisors, foremen, estimators, and workers needs in fall protection safety and the applicable OSHA standards. Class comes with student manual and class card. Introduction to OSHA Standards. The "Duty" of the Employer Subpart "M" General Requirements. Review Standards Part 1926.500. Review Standards Part 1926.501. Review Standards Part 1926.502. Review Standards Part 1926.503. Personal Fall Arrest Systems. Demonstration of Fall Protection - PPE Develop and Maintain a Fall Protection Plan. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	7.50			X
(4)	OSHA 10hr for Construction  This 10 hour course is designed to meet your supervisors, foremen, estimators, and workers needs in Construction Safety and the required OSHA standards. Introduction to OSHA ~ Learn to use OSHA book ~ Identify and Control Hazards. All attendees will receive an OSHA book, a student training manual, and a laminated OSHA card.  (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	10.00			X
<b>a</b>	OSHA 30hr for Construction  This 3- 4 day, 30 hour, course is designed to meet your supervisors, foremen, estimators, and workers needs in Construction Safety and the required OSHA standards.  Introduction to OSHA ~ An overview of all the subparts required by OSHA ~ Protective System requirements ~ Identify and Control Hazards ~ Managing safety in the field.	30.00			X

	(PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)			
<b>3</b>	Scaffold Competent Person Class This 1 day, 7.5 hour course is designed to meet your supervisors, foremen, estimators and workers specific needs in scaffolding safety and the required OSHA standards.  (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	7.50		X

### Hub International Northeast: For more information, contact Guy Gioino at

guy.gioino@hubinternational.com.

Course Title	Contact Hrs	CET	CAT	Safety
OSHA 10 Hour Safety Course This program covers Construction Safety, Electrical Hazards, Falls, Health Hazards and Hazard Communications, Personal Protective Equipment, Hand & Power Tools and Fire Protection and many other areas. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	6.00			X
Safety Training - 2013  The 3-hour program is intended to build skills for recognizing and preventing hazards in the workplace. The training covers four key topics, which are: fall protection, electrical hazards, personal protective equipment and hand/power tools. This program will enable employees to better recognize safety hazards, understand how to control the identified hazards, and reduce the risk of workplace injuries.	3.00			X
Safety Training - 2014 The training covers four key topics, which are: Hazard communication – Globally Harmonized System, confined spaces, and personal protective equipment. This program will enable employees to better recognize safety hazards, understand how to control the identified hazards, and reduce the risk of workplace injuries.	3.00			X
Safety Training - 2015 The training covers three key topics, which are: Fall Protection, Lockout/Tagout and Personal Protective Equipment. This program will help enable participants to recognize safety hazards, understand how to control the identified hazards, and reduce the risk of workplace injuries.	3.00			X
Safety Training - 2016 The 3-hour program is intended to build skills for recognizing and preventing hazards in the workplace. The training covers three key topics, which are: electrical safety, confined spaces, and personal protective equipment. This program will enable employees to better recognize safety hazards, understand how to control the identified hazards, and reduce the risk of workplace injuries.	3.00			Х
Safety Training - 2018  The 3-hour program is intended to build skills for recognizing and preventing hazards in the workplace. The training covers three key topics, which are: electrical safety, confined spaces, and personal protective equipment. This program will enable employees to better recognize safety hazards, understand how to control the identified hazards, and reduce the risk of workplace injuries.	3.00			Х
Safety Training for Handi-Lift - 2018  The 3-hour program is intended to build skills for recognizing and preventing hazards in the workplace. The training covers three key topics, which are: electrical safety, confined spaces, and personal protective equipment. This program will enable employees to better recognize safety hazards, understand how to control the identified hazards, and reduce the risk of workplace injuries.	3.00			Х

### Inland Northwest Inspections: For more information, contact Duane Leopard at

duane@inlandnorthwestinspections.com

	Course Title	Contact Hrs	CET	CAT	Safety
	Updates and Changes to NEC 2017 and A17.3 2015  This course will cover the updates and changes to NEC/NFPA 70 2017 since the 2011 version as they pertain to the installation of new elevators, dumbwaiters and other modes of vertical transportation. In its second part, this class will cover the changes brought about in A17.3 2015 as they apply to Washington State.	4.00	X 4.00	X 2.00	
<b>2</b>	Changes and Updates to A17.1 Safety Standard for Elevators 2016	4.00	Х		

This class will cover many of the changes between 2010 and 2016 editions of the code. It will cover how to use the code and the process and scope Parts 2, 3 and 8. It will cover the changes in maintenance, new installation and alterations as they will affect Washington State and the City of Spokane. We will also cover the 2015 IBC building code as it applies to Fire Service Access Elevators and Occupant Evacuation Elevators.

#### KEB America, Inc.: For more information, contact Tony Heiser at tony.heiser@kebamerica.com

	Course Title	Contact Hrs	CET	CAT	Safety
$\square$	KEB Elevator Products Training Course/ F5 Elevator Drive, R6 Line	8.00	X		
«»	Regeneration, Combivis Software (KEB Products Training)				
	An overview of the topology of the KEB F5 Elevator driver covering the input, intermediate, and output stages. An overview of the elevator software (LED & LCD keypads), typical symptoms and solutions to identify and fix common drive problems, drive status' and fault codes, individual components contained within the F5 drive, the design of AC motors, start-up and adjustment of the KEB F5 Elevator Drive				

#### Kencor, Inc.

	Course Title	Contact Hrs	CET	CAT	Safety
Ω	OSHA Safety Course	8.00			Х
a	(PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in				
	excess of the maximum will not be applied towards renewal)				

#### Kings III Communication: For more information, contact Katie Thomas at kthomas@kingsiii.com

	Course Title	Contact Hrs	CET	CAT	Safety
	Two Way Communication Codes & Requirements  The course will help participants to understand the relevant codes and requirements for elevator emergency communication. Major course topics will include: How to test for elevator phone compliance: What the coded require: Common installation mistaless:	2.00	Х	Х	
	elevator phone compliance; What the coded require; Common installation mistakes; Answering elevator phone calls; Phone line verification. Information included will be derived from ASME codes, ADA laws, and interviews with consultants and industry experiences.				

### Koshak, John W: For more information, contact John Koshak at john@elvssl.com

	Course Title	Contact Hrs	CET	CAT	Safety
<b>(2</b>	ASME A17.3-2015 Training Course The 8 hour course will cover the code requirements of A17.3-2005, Safety Code for Existing Elevators and Escalators.	8.00	Х	Х	
(2)	ASME A17.1 Code Update & LU/LA Training Course The 8 hour course will cover the code requirements of A17.1 and LU/LA.	8.00	Х		
(4	ASME A18.1 Code Update The 1 hour course will cover the code requirements of A18.1.	1.00	Х	Х	
a	Code Education 2016 – A17.1/B44  The 8 hour course will cover the code requirements of A17.1/B44.	8.00	Х		
<b>(2</b> )	Code Education 2013 – A17.1/B44 Session will discuss the changes in A17.1 2010 and A17.1 2013 number in the hundreds. The class details many of the major changes and touches on the minor changes.	4.00	X		
<b>2</b>	Elevator Personnel Continuing Education 2018  This ten-hour workshop is to provide continuing education for certified elevator personnel. The course will include update on current local Statutes and Administrative Rules governing elevators, overview of all eight ASME A17 Codes for Elevators and Escalators, and technical content related to Maintenance, and Component Training as detailed below using instructional PowerPoint presentations.	10.00	Х		
<b>(2)</b>	Hoistway Doors Force This course explains the design requirements A17.1 requires for Hoistway Doors and Entrances.	2.00	Х	Х	
(2)	Horizontal Door Closing Force This course explains the door closing force requirements of A17.1/B44. It emphasizes the importance of compliance and how to adjust common types of door operator systems.	2.00	Х	Х	
(2	Solid State Motor Drive History & Theory	4.00	Х	Х	

Session will discuss basic electricity theory, magnet energy, and motor theory; motor		
control of elevators and evolution of solid state motor controllers.		

Magnetek: For more information, contact Tony Frey at tfrey@magnetek.com or Jeff Johnson at

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	Course Title	Contact Hrs	CET	CAT	Safety
<b>A</b>	<ul> <li>Elevator Drive Technology Seminar</li> <li>Session covers the following topics:</li> <li>Current and new elevator drive technology.</li> <li>Making informed decisions when planning new or upgrading existing elevator installations.</li> <li>The latest in the state-of-the-art elevator drive technology.</li> <li>The advantages and disadvantages of this new technology.</li> <li>Elevator drive applications including power line harmonics, emergency generators, energy consumption and battery back-up systems.</li> </ul>	2.00	Х		

Maxton Manufacturing: For more information, contact Irene Muller at irene@maxtonvalve.com

	Course Title	Contact Hrs	CET	CAT	Safety	
Ω	Maxton Hydraulic Control Valve Training	4.00	Х	X		
	Participants will gain a better understanding on how to determine the proper valve for the					
	job; how variables such as temperature, contamination and pressure effect the control valve					
	and overall elevator performance; proper maintenance practices; proper valve adjustment			1		

Medic First Aid: For more information, visit http://hsi.com/MEDIC\_programs/

	Course Title	Contact Hrs	CET	CAT	Safety
<b>~</b>	Basic CPR and First Aid for Adults. Combined Adult CPR and First Aid training program designed specifically for the occupational first aid provider. This program helps employers meet OSHA and other federal and state regulatory requirements for training employees how to respond and care for medical emergencies at work. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	4.00			Х

**James Meyer Consulting, Inc.:** For more information, contact James Meyer at meyerconsulting@verizon.net.

	Course Title	Contact Hrs	CET	CAT	Safety	
	California Elevator Regulations Seminar as They Exist Today & Proposals for the Future  Emphasis on Development of Regulations, Latest Adopted Conveyance Regulations, Special Focus on Limited Use/Limited Access Elevators & A18 Equipment	8.00	Х	Х		7
	( 1 day seminar)					

# **Motion Control Engineering (MCE):** For more information, contact Paulina Del Toro at 916-463-9492 or Paulina.DelToro@nidec-mce.com

Contact Course Title CET CAT Safety Hrs 15.00 iControl Installation, Adjustment & Troubleshooting A 2-day seminar designed to educate elevator consultants, mechanics, adjusters and maintenance technicians to effectively set up, install and troubleshoot MCE's iControl elevator control systems. Major course topics include installation; adjustment; best practices; diagnostics; system troubleshooting; component design and failure analysis. The course material is based on the installation manuals for the iDC and iAC control products used for geared and gearless traction machine applications. The training course includes both lecture and hands-on instruction with real controllers in a lab environment. Motion 2000/4000 - Installation, Maintenance & 14.50 Χ Troubleshooting A 2-day seminar designed to educate elevator consultants, mechanics, adjusters and maintenance technicians to effectively set up, install and troubleshoot MCE's Motion 2000/4000 elevator control systems. Major course topics include installation; adjustment; best practices; diagnostics; system troubleshooting; component design and failure analysis. The course material is based on the installation manuals for the Motion

	Course Title	Contact Hrs	CET	CAT	Safety
	2000/4000 control products used for geared and gearless traction machine applications. The training course includes both lecture and hands-on instruction with real controllers in a laboratory environment.				
<b>~</b>	MCE Legacy Equipment: IMC/PTC/VVMC/HMC - Maintenance & Troubleshooting  A 2-day seminar designed to educate elevator consultants, mechanics, adjusters and maintenance technicians to effectively set up, install and troubleshoot MCE's Legacy elevator control systems. Major course topics include installation; adjustment; best practices; diagnostics; system troubleshooting; component design and failure analysis. The course material is based on the installation manuals for the IMC (AC & DC), VVMC 1000 (AC & DC), HMC 1000 (hydraulic) control products used for geared and gearless traction machine applications. The training course includes both lecture and hands-on instruction with real controllers in a laboratory environment.	14.00	X		

Mowrey Elevator Co: For more information, contact Dan Redmond at 850-526-4111 or dan@mowreyelevator.com.

	Course Title	Contact Hrs	CET	CAT	Safety	
<b>(5</b> )	<b>Continuing Education Course, MTC-003:</b> This course has been designed to keep elevator mechanics current & informed so they can safely & competently perform their duties. It contains technical and safety instruction that is relevant to elevator construction, alteration, modification, repair & maintenance. It reviews current practices and provides an overview of recent changes to the various codes and regulations.	8.00	X 6 hrs	X 6 hrs	X 2 hrs	

**Performance Learning Solution:** For more information, contact James Ganley at jganley@plstrains.com or 217-423-3541

	Course Title	Contact Hrs	CET	CAT	Safety
	Basic First Aid, CPR & AED for Adults  American Red Cross developed & sponsored program trains participants to recognize and care for life-threatening respiratory or cardiac emergencies in adults and provides the knowledge and skills needed to care for injury or sudden illness until professional medical help arrives. This comprehensive course meets training guidelines for first aid programs established by OSHA. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	8.00			Х
	Bloodborne Pathogens Training  Program trains and provides individual with an understanding of the intent of the bloodborne pathogens regulation issued by OSHA; how bloodborne pathogens are spread; how to help prevent exposure incidents by following work practice controls, using engineering controls and personal protective equipment, practicing good personal hygiene and properly cleaning and disinfecting equipment and supplies; and to recognize, report and follow up on employee exposures to infectious materials. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	2.00			X
2	Confined Space Entry & Non-entry Rescue  This course is designed to provide program participants with the knowledge to effectively recognize and evaluate those hazards associated with permit and non-permit required confined spaces. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	4.00			Х
	Confined Space Rescue This course is specifically designed for those persons responsible for making entry rescues within confined spaces. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	8.00			Х
<u> </u>	Electrical Safety and NFPA 70E  This one day course defines the requirements for work practices that workers should use to avoid injury from a release of energy when performing tasks involving electricity. This course enable participants to prevent or minimize exposure to widely recognized electrical hazards as well as to better understand the importance of the relationship between OSHA and NFPA 70E. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted.  All safety hrs in excess of the maximum will not be applied towards renewal)	8.00			Х

<u> </u>	Fall Protection Training  To help reduce the significant number of workplace injuries and fatalities related to falling on the job, this program instructs participants on acceptable fall protection practices and safety measures.	2.00		Х
<b>4</b>	OSHA 10-hour General Industry Outreach  This course will introduce participants to a variety of OSHA policies, procedures and standards as well as general industry safety and health principles covered by OSHA.  (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	10.00		Х

**Praxiom Risk Management:** For more information, contact John Conrad, Jr. at jconrad@praxiom-rm.com or 888-350-7729.

	Course Title	Contact Hrs	CET	CAT	Safety
<u> </u>	Hazard Communication	1.00			Х

**Premier Elevator:** For more information, contact Keith Evans at keithevans@premier-elevator.com.

Course Title	Contact Hrs	CET	CAT	Safety
Control of Hazardous Energy	1.00			Х

Qualified Elevator Inspector Training Fund (QEITF): For more information, contact Mike

Morand at mmorand@eiwpf.org

	Course Title	Contact Hrs	CET	CAT	Safety
	QEITF Elevator Safety Code Review	8.00	Х		

Safety Resources LLC: For more information, Charles Northam at

ctnortham@safetyresourcesllc.com or 410-742-7233.

	Course Title	Contact Hrs	CET	CAT	Safety
<u> </u>	Crane Rigging & Signaling This course reviews the applicable OSHA regulations on material handling.  (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	7.00			Х
<b>•</b>	Medic First Aid  This course is a fundamental training program in emergency care. CPR and other important emergency care skills are combined into a single course. (PLEASE NOTE: A maximum of 3 contact hrs in safety will be accepted. All safety hrs in excess of the maximum will not be applied towards renewal)	8.00			Х

Savaria: For more information, Todd Parker at tparker@savaria.com or 800-661-5112.

	Course Title	Contact Hrs	CET	CAT	Safety
	Troubleshooting & Safety – Outside	11.00	X 10 hrs	X 10 hrs	X 1.0 hr

### **Schindler Elevator Corporation:** For more information, contact Dave Vanderpool at

dave.vanderpool@schindler.com

	Course Title	Contact Hrs	CET	CAT	Safety
<u>a</u>	4 Station, Safety Training	4.00			X
<u> </u>	Stand Up for Safety	3.00			Х

**Stiltz Inc:** For more information, contact Richard Boseley at Richard.Boseley@stiltzlifts.com

Course Title	Contact Hrs	CET	CAT	Safety

Ω	Stiltz Home Lift Installation/ Advanced Troubleshooting Training	14.00	Χ	Х	
	Course				
	The Stiltz Home Lit Training Course will provide a hands on approach to cover the full				
	installation, pre turn-over checks, post installation routine maintenance, and fault				
	troubleshooting of the Stiltz Home Lift Residential Lift/Elevator product line. All instruction				
	shall have a foundation based upon the ASME A17 and A18 Codes respectfully				

Schroll, Edgar: For more information, contact Edgar Schroll at ewschroll@gmail.com

	Course Title	Contact Hrs	CET	CAT	Safety
<b>(E</b> )	Electron Flow & Solid State Devices  The session focus is the relationship between electron flow and solid state devices.	VARIED	X 5.5 hr	X 4.0 hr	X 1.5 hr
<b>(2)</b>	The Relationship Between Resistance and Current The session focus is the relationship between resistance & current and electrical safety.	VARIED	X 6.5		X 1.5 hr

Smartrise Engineering Inc.: For more information, contact Ali Ezzeddine at ali@smartrise.us

		Course Title	Contact Hrs	CET	CAT	Safety
	.)	Smartrise Engineering Technical Training – 8 hour	8.00	X		
a.,		Attendees will learn about the Smartrise Elevator Control System architecture as well as				
		how to install, troubleshoot, test and maintain the system at this one-day seminar.				
	$\Box$	Smartrise Engineering Technical Training – 4 hour	4.00	X		
4.		Attendees will learn about the Smartrise Elevator Control System architecture as well as				
		how to install, troubleshoot, test and maintain the system at this one-day seminar.				

### Staying Home Corporation: For more information, contact Michael Vogt at

mikev@stayinghome.com or 816-380-1080

	Course Title	Contact Hrs	CET	CAT	Safety
	Residential Elevator & Dumbwaiter School Service school for the installation and troubleshooting of elevators, dumbwaiters manufactured by Staying Home				
	➢ Installation of Elevators	3.75	Х	Х	
	Completing the Install	2.75	Х	Х	
	➢ Trouble Shooting	1.00	X	X	
	➤ Installation- Shafted Elevator	3.75	Х	Х	
	➢ Elevator Test	1.00	Х	Х	
	Dumbwaiter	2.75	Х	Х	
<u> </u>	Staying Home Corporation Stairway Lift School Service school for the installation and troubleshooting of Stairwaylifts manufactured by Staying Home	3.75	Х	Х	
<u>a</u>	Staying Home Corporation Vertical Platform Lift School Service school for the installation and troubleshooting of vertical platform lifts manufactured by Staying Home	7.50	X 7.5 hr	X 6.25 hr	

### Victaulic: For more information, contact Peter Barnes at Peter.Barnes@victaulic.com or 248-240-

7179

	Course Title	Contact Hrs	CET	CAT	Safety
<u> </u>	Grooved Mechanical Piping for Hydraulic Elevators  This session is an overview and hands on demonstration of the different types of grooved couplings (flexible and rigid), proper gasket selection, correct installation techniques for Victaulic grooved pipe couplings, and roll grooving for pipe.	2.00	Х		

### Virginia Controls: For more information, contact Tom Reamsnyder at

tom.reamsnyder@vacontrols.com or 804-225-5530

	Course Title	Contact Hrs	CET	CAT	Safety
<b>,</b>	AS2H- Vision 2.0 Hydraulic Controller Elevator Training	8.00	Χ	Χ	
استيته	To provide an understanding of the systems & components of the Vision 2.0 controller,		8.0 hr	4.0 hr	
	and the related machine & field devices connected to it, which in total form an elevator				

<u> </u>	system. To provide procedures for installing and trouble-shooting the Vision controller in the most efficient manner, using the schematics & manuals supplied by VCI.  MVFCL Traction Elevator Controller Training  The objective of the session is to provide an understanding of the components of the MVFCL controller and the related machine and field devices connect to it that form an elevator system. To provide a procedure for installing and troubleshooting an MVFCL controller in the most efficient manner by using the schematics and manuals supplied.	7.00	X	
<u> </u>	Safe Elevator Operation with Serial I/O Serial I/O control methods applied to elevator operation has the ability to simplify and speed elevator installation. Done correctly, these methods can meet the expectations of the public and our industry for elevator safety and reliability. This presentation seeks to identify some of the boundaries contained in the elevator safety code and some of the limits within the technology itself, that the elevator specialist may encounter in the application of Serial I/O.	1.00	X	
2	VSH – Vision Hydraulic Elevator Controller  To provide an understanding of the systems & components of the VSH controller and the related machine and field devices connected to it, which in total form an elevator system. To provide a procedure for installing and trouble-shooting a VSH controller in the most efficient manner by using the schematics and manuals supplied VCI.	8.00	Х	

### Waupaca Elevator Company: For more information, contact 800-238-8739 or

rrice@waupacaelevator.com

	Course Title	Contact Hrs	CET	CAT	Safety
4	Principles and Installation Technical Training Principles and methods of installing & maintaining Waupaca Elevator residential elevators and dumbwaiters are taught in this course. Course topics include safety, service, installation, troubleshooting, basic hydraulics, basic electronics and code compliance. The course combines a classroom and lab approach to facilitate the application of topics presented and discussed.	19.00	Х	Х	

### Wurtec Inc: For more information, contact Tim Lykowski at tim.lykowski@wurtec.com

	Course Title	Contact Hrs	CET	CAT	Safety
<b>)</b>	False Car System	4.00	X		
<b>M</b>	This session will discuss the false car, preparation, installation, final tips and checks and maintenance & repair.				