

Industry Training courses, breakfasts, luncheons & tours listed below are presented by industry associations, exhibitors, and media partners – for inquiries, please note contact information reflected at bottom of each description.

Sessions are listed alphabetically in order: 1) courses; 2) tours; 3) breakfasts; & 4) luncheons.

INDUSTRY TRAINING COURSES

ACI Concrete Construction Special Inspector Certification

Presented by the Las Vegas Chapter of the American Concrete Institute.

Course Code: ACISIC

REVIEW Date/Time: Monday – Wednesday, January 16 - 18 | 8:00 am - 3:30 pm

EXAM Date/Time: Thursday, January 19 | 8:00 am – 12:30 pm

Location: LVCC North Hall



The Concrete Construction Special Inspector Certification has become a requirement in many areas to document that a person understands and can perform special inspections based on code and job specifications for a project. This program will review requirements of concrete construction including plans reading, formwork installation and removal, reinforcements, embedments, sampling and testing freshly mixed concrete, conveying, placing, consolidation, finishing, jointing, curing, and protection.

NOTE: Interested candidates must have work experience in areas of concrete construction inspection.

Registration fee includes 3-day review course, written examination, ACI publication CP-21 (\$396 value) and lunch on review days, Monday - Wednesday.

The workbook for the ACI Concrete Construction Special Inspector Certification program is the CP-21 Package which contains 14 ACI documents and the CRSI Manual of Standard Practice. This workbook is included in the registration fee and will be shipped to registrants beginning December 15th on a weekly basis. Individuals that register after December 30th will need to pick up their workbooks onsite at the World of Concrete Education Office (Rm N249), Sat – Sun, Jan 14 - 15.

Successful candidates for Concrete Construction Special Inspector should be able to:

1. Understand the role of the Special Inspector on a concrete construction project
2. Verify compliance of concrete construction with plans, specifications and codes
3. Understand inspection during preplacement, placement and post-placement operations

CERTIFICATION EXAMINATION: The three-hour written examination is open-book and consists of 80 multiple-choice and true-false questions and is followed by a one-hour plans reading examination consisting of 20 multiple-choice and true-false questions designed to test the examinee's ability to read and understand engineering drawings. In order to obtain certification as an Associate Special Inspector, candidates must pass both exams with a score of 70% and hold a current ACI Concrete Field Testing Technician - Grade I certification.

Individuals can upgrade to full Inspector status upon submittal and approval of sufficient education/work experience. For more information on this program, go to www.concrete.org and select Certification Programs under the Certification tab.

CANCELLATION POLICY: If registrant cancels their registration after December 15th, there is a **\$400 non-refundable fee** to cover the cost of the workbook. A minimum of 5 registrants must be registered by December 15th to run this program. If the minimum attendance is not met, your registration fee will be refunded.

ACISIC Certification Course Fee: \$1,295; \$1,495 after 12/1/16 and onsite

Questions about the review course or certification program can be answered by
Las Vegas Chapter ACI at acilasvegas@earthlink.net or 702.656.8827.
For information about ACI visit www.concrete.org.

NEW! ACPA Achieving High Quality Roller Compacted Concrete

Presented by the American Concrete Pavement Association.

Course Code: ACPARC

Date/Time: Monday, January 16 | 8:30 am - 12:00 pm

Location: LVCC North Hall



This comprehensive training session is presented by some of the foremost experts in Roller Compacted Concrete (RCC) paving. Often referred to as the “third pavement material,” RCC has many features and benefits, but also requires a different approach to design, construction, and repair for low-volume streets, highway shoulders, industrial applications, and military facilities. Specific RCC projects, issues and key points will be addressed.

This training is a must for small and large contractors, including those with and without RCC paving experience. Project and construction managers, estimators, equipment managers and quality managers, as well as civil, geotechnical and pavement engineers will learn about this new pavement type. The training is also well-suited to agencies and owners, architects/designers, building managers, facilities managers, and others interested in knowing more about how RCC pavements can be used.

The training course will feature three 45-minute modules, including:

- Introduction to RCC—history of RCC, basic RCC paving process, features/benefits, and market applications
- Quality RCC Construction—basics of design, available construction methods, preparing a mixture design, handling materials, subgrade preparation, equipment selection, placement, jointing and curing
- Troubleshooting RCC—common problems with RCC pavements, how to recognize defects and deficiencies, and how to prevent and repair problems

ACPARC Fee: \$175

NOTE: Save when purchasing both of the Monday Pavement sessions!

SPECIAL SAVINGS: Purchase BOTH ACPARC & ACPAPS for \$300 (save \$50)

NEW! Constructing Smooth Concrete Pavements: Tips, Techniques and State of the Art Equipment

Presented by the American Concrete Pavement Association.

Course Code: ACPAPS

Date/Time: Monday, January 16 | 1:00 pm - 4:30 pm

Location: LVCC North Hall



This comprehensive training session will be presented by leading authorities on the topic of concrete pavement smoothness, equipment automation and instruments. Subject matter experts will discuss equipment, instruments, and emerging technologies impacting concrete pavement smoothness. This training is a must for contractors of all sizes and experience levels. Project and construction managers, estimators, equipment managers and quality managers, as well as civil, geotechnical and pavement engineers will benefit from learning about the latest developments

This course includes four unique modules:

- Avoiding the Rough Stuff—brief overview to gain better understanding of roughness, why smooth pavements are so important, and how a slip form paver works
- Smoothness Begins with the Mixture—creating a good slipform mixture and evaluating essential attributes of the concrete mixture with new tests & technology
- Construction Factors a Contractor Must Consider—details for building smooth pavements including set-up, operation, grade preparation, control-charting, etc.
- How Equipment & Instruments are Making Smooth Pavements Smoother—stringless paving, real-time smoothness equipment, lightweight profilers for measuring smoothness, software for evaluating profiles, magnetic topography for dowel location, and other equipment and instruments used to achieve smoothness in concrete paving operations

ACPAPS Fee: \$175

NOTE: Save when purchasing both of the Monday Pavement sessions!

SPECIAL SAVINGS: Purchase BOTH ACPARC & ACPAPS for \$300 (save \$50)

ACPA FuturePave: Concrete Paving

Presented by the American Concrete Pavement Association.

Course Code: ACPAWE

Date/Time: Wednesday, January 18 | 9:00 am - 12:00 pm

Location: LVCC North Hall



What You Need to Know About Where Concrete Paving Fits in the Changing World of Surface Transportation

The American Concrete Pavement Association presents an informative look at how the concrete pavement industry is meeting the challenges of the evolving world of construction, rehabilitation, and preservation of all facets of the industry (highways, airports, streets, industrial, etc.).

Topics include:

- The Association and Promotion of Concrete Pavements
- Market Analytics/Trends
- Current Realities and the Future of Sustainable Planning & Construction
- Modern Tools and Equipment Available for Design, Construction, and Preservation of Concrete Pavements – where the industry is heading
- Digital and other Promotional Resources
- Industry Strategies for Success
- Open Topics & Feedback

This course is geared to contractors, agencies/owners, consultant/owner representatives, and materials & equipment suppliers. All are welcome!

NOTE: Attendees will receive a free safety shirt and a certificate for a free webinar in our 2017 program (a \$100 value). ACPA will award 3.0 Professional Development Hours. Attendees will receive a certificate of attendance and a self-reporting form onsite. **Space is limited, so register early!**

ACPAWE Fee: \$230; \$275 after 12/1/16 and onsite

NEW! ACPA Pavement Jointing Hands-on Workshop

Presented by the American Concrete Pavement Association.

Course Code: ACPATH

Date/Time: Thursday, January 19 | 1:00 pm - 5:00 pm

Location: LVCC North Hall



A Training Experience Demonstrating How to Properly Select and Layout Joints for Concrete Pavements & Slabs

The American Concrete Pavement Association presents the details of jointing for concrete pavements and slabs, an expansion of the Locating Joints Properly presentation located in the WOC 90-Minute Seminar Program (TH143). Workshop participants will learn the latest on dowels, joint sawing, sealing, and how to position joints for best results. This hands-on training will focus on ACPA's ten-step joint layout method which has been used on hundreds of pavements across the world over the past two decades. Sample problems from all market areas (pavement and flatwork) will be available and reviewed. Attendees will have an opportunity for individual instruction and group discussion after working through selected problems. This training will be of immediate benefit in areas of improved jointing and less associated problems with slab cracking or other jointing defects.

This course is geared to contractors, agencies/owners, and consultants with interest in pavements, flatwork and site paving. All are welcome!

NOTE: Attendees will receive related publications and a free tee-shirt from ACPA. ACPA will award 4.0 Professional Development Hours and attendees will receive a certificate of attendance and a self-reporting form onsite.

Space is limited, so register early!

ACPATH Workshop Fee: \$275; \$300 after 12/1/16 and onsite

Questions about the pavement courses should be directed to Bill Davenport at ACPA.
Phone 847.966.2272 or email bdavenport@acpa.org For more information visit www.acpa.org

ASA Shotcrete Nozzleman Education Course

Presented by the American Shotcrete Association.



Course Code: ASATU

Date/Time: Tuesday, January 17 | 9:00 am - 4:00 pm

Location: LVCC South Hall

This course is designed for shotcrete nozzlemen, individuals involved with inspection of shotcrete, and anyone interested in learning about the principles and practices that must be known and understood for a nozzleman to satisfy his role in the quality application of the shotcrete process.

ASA Nozzleman Education Courses present an overview on placement technique, finishing, curing, testing, equipment and safety as it relates to the nozzleman and the shotcrete process. This course also helps to prepare individuals for participation in the ACI Nozzleman Certification program. ACI required work experience, written exam, performance exam and other program criteria will be discussed.

The CP-60(09) Shotcrete Nozzleman Craftsman Workbook is included with the course registration fee.

Please Note:

- **Attendance of this course alone will not result in certification as an ACI Shotcrete Nozzleman.**
- This course will satisfy the education course requirement for a nozzlemen wishing to pursue certification as an ACI Shotcrete Nozzleman through ASA
- Attendees wishing to pursue ACI Certification will need to arrange for a certification course with ASA separately from this course (Wet Mix Exams are available for additional charges, please contact ASA directly for details and requirements)
- Attendees will qualify for and receive a complimentary 1-year ASA Nozzleman Membership
- Lunch is not provided with this course. A one-hour break is scheduled for lunch.

ASATU Fee: \$295; \$345 after 12/1/16 and onsite

Questions about this program, along with interests in pursuing certification, should be directed to Alice McComas with ASA. Ph: 248-848-3780 or Email Alice.Mccomas@shotcrete.org. For additional information about ASA visit www.shotcrete.org.

NEW! CICL Application of Shotcrete Course (offered in Spanish)

Presented by the Colegio de Ingenieros Civiles de León A.C..



Course Code: CICLWE

Date/Time: Wednesday, January 18 | 9:00 am – 1:00 pm

Location: LVCC North Hall

This theoretical training course is designed to improve the skills of the nozzleman in the workplace and improve the quality of shotcrete placed. After completing this course, participants will obtain basic knowledge of technology of concrete and shotcrete, including health and safety measures. Case studies will demonstrate how to apply methods of design, placement techniques, and evaluation of quality control in fresh and hardened states.

Topics covered:

- Technology of the component materials
 - Cement, water, additives, aggregates, fibers
- Introduction to mix design
 - properties of shotcrete in fresh and hardened; shotcrete types and applications
 - quality control testing; specification vs performance evaluation
- Shotcrete equipment dry mix, wet mix
- Manual and automated operation
 - pumping and projection; placement techniques; manual and robotized application wet mix
- Shotcrete as part of the support system
 - safety, health and environment
- Testing and quality control tests

CICLWE Fee: \$215; \$275 after 12/1/16 and onsite

CICL Aplicación del Concreto Lanzado

Presented by the Colegio de Ingenieros Civiles de León A.C..



Course Code: CICLWE

Date/Time: Miércoles, Enero 18 | 9:00 am – 1:00 pm

Location: LVCC North Hall

OBJETIVO: Curso capacitación teórica para mejorar las habilidades del lanzador en el lugar de trabajo para mejorar la calidad del concreto lanzado colocado. Al finalizar el curso, el participante obtendrá los conocimientos mínimos de la tecnología del concreto y concreto lanzado, incluyendo las medidas de seguridad y salud, a través de la revisión documental del concreto lanzado.

METODOLOGÍA: Enseñanza teórico basada en la exposición y análisis de los contenidos con apoyo de material audio visual y diapositivas con temas indicados en el contenido, empleados según avance del curso. Además del análisis de casos por parte del instructor planteando casos reales, a fin de mejorar y asegurar la comprensión y la forma de aplicar los métodos de diseño, las técnicas de colocación y la evaluación del control calidad en estado fresco y endurecido.

Curso teórico:

- Tecnología de los materiales componentes
 - cemento, agua, aditivos, agregados, fibras
- Introducción al diseño de mezclas
 - propiedades en estado fresco y endurecido del concreto lanzado; tipos de concreto lanzado y aplicaciones
 - ensayos de control de calidad; evaluación especificación vs desempeño
- Equipo para la colocación de concreto lanzado
 - operación manual y robotizado; bombeo y proyección; técnicas de proyección; producto en aplicación manual y robotizado por vía húmeda
- Concreto lanzado como parte del sistema de soporte
 - seguridad, salud y medio ambiente
- Pruebas y ensayos de control de calidad

CICLWE Fee: \$215; \$275 por 12/1/16 y en el sitio

Questions about this course should be directed to Ing. Raúl Bracamontes Jiménez, raulb@adra.com.mx.

NEW! CIM Volumetric Concrete Workshop

Presented by Concrete Industry Management (CIM) of California State University, Chico.

Course Code: THVMC

Date/Time: Thursday, January 19 | 8:30 am – 4:30 pm

Location: LVCC North Hall



Producing quality volumetric concrete is quite challenging. The goal of this workshop is to provide volumetric concrete producers and volumetric mixer operators with fundamental understanding of factors affecting volumetric concrete production. By completing this workshop, attendees should be able to acquire knowledge to boost quality of their products, increase efficiency, and improve their business.

Topics include:

- Panel discussion on volumetric concrete business
- Calibration process of volumetric mixers
- Concrete constituents and their impact on concrete properties
- ASTM C94 vs ASTM C685
- Fresh and hardened concrete properties and their importance
- Quality control issues for volumetric concrete

Learning objectives:

1. Understand ASTM C685 standard
2. Understand volumetric mixer calibration
3. Gain knowledge of factors affecting quality of concrete

The workshop is conducted by Dr. Feraidon Ataie, director of Concrete Industry Management program at California State University-Chico.

Space is limited to 40 participants, so register early!

THVMC Fee: \$375

Questions about this workshop should be directed to Feraidon Ataie, fataie@csuchico.edu or 530-898-5489.

CSDA Estimating Course

Presented by the Concrete Sawing and Drilling Association.



Course Code: CSDAMT

Date/Time: Monday - Tuesday, January 16 - 17 | 8:00 am – 5:00 pm

Location: LVCC North Hall

Course Content: Estimating is a two-day classroom course focused on the practice of estimating sawing and drilling jobs. The course outlines the role of an estimator, reviews different methods of estimating, compares estimates and actual costs and discusses how estimators affect the company's bottom line. Attendees will learn what the costs of a job are, estimating techniques, how to build an estimating model, how to verify the estimate, how to read blueprints and customer service skills.

Requirements: Attendees should have at least three years of experience in the concrete cutting industry and want to become estimators, or be current estimators who want to broaden their knowledge in the field of estimating.

IMPORTANT: All students are advised to bring a calculator and architect/engineering scale for the blueprint section of the course. Registration fee includes two days of instruction and all classroom materials.

CSDAMT Fee: \$785

CSDA ST115 Certification

Presented by the Concrete Sawing and Drilling Association.



Course Code: CSDATU

Date/Time: Tuesday, January 17 | 8:00 am – 1:00 pm

Location: LVCC North Hall

Course Content: This one-day certification class will provide instruction on how to correctly measure concrete micro surface texture and is based upon CSDA's ST115 Standard which is being rapidly and widely accepted and required by architects and designers for surface preparation. The course will discuss the importance of surface preparation and talk about proper tool selection to mitigate damage. Students will be issued a certification upon successful completion of the class. **Space is limited to 25 participants, so register early!**

CSDATU Fee: \$300

NEW! CSDA GPR Certification

Presented by the Concrete Sawing and Drilling Association.



Course Code: CSDATW

Date/Time: Tuesday - Wednesday, January 17 - 18 | 8:00 am – 5:00 pm

Location: LVCC North Hall

Course Content: The Concrete Sawing and Drilling Association is offering the industry's first Ground Penetrating Radar (GPR) certification course in concrete investigation, produced in conjunction with 3 of the largest GPR manufacturers. Students will be taught and tested on GPR theory, proper mark out procedures, limitations of GPR and advanced locating techniques. All students are required to have taken and passed initial manufacturer training. No certification will be awarded to any participant that has not completed the basic training course offered by at least one GPR manufacturer. These courses are geared for experienced GPR professionals with at least 2 years of field experience in concrete cutting & coring applications. Students will be required to be tested with both hands-on application and class room testing. Equipment will be provided by GSSI, Sensors & Software and Hilti.

Space is limited to 20 participants, so register early!

CSDATW Fee: \$785

CSDA Diamond Cutting: Sharpen Your Skills

Presented by the Concrete Sawing and Drilling Association.



Course Code: CSDAWTH

Date/Time: Wednesday, January 18 | 8:00 am – 5:00 pm & Thursday, January 19 | 7:00 am – 4:00 pm

Location: LVCC North Hall

This classroom course educates attendees on the fundamentals of diamond cutting in the sawing and drilling industry. Instruction will cover diamond tool technology—how tools cut and why they don't—the value of safe work habits and proper equipment maintenance. Discussions also cover cutting principles, systems and proper techniques for disciplines including core drilling, slab sawing, hand sawing, wall and wire sawing with scheduled outdoor demonstrations. The course is suitable for operators, estimators, customer service and sales representatives, architects, engineers, general contractors and government officials involved in diamond cutting. Completion of this course qualifies as a prerequisite for participation in the CSDA's advanced Operator Certification Program.

Registration fee covers classroom materials, handbooks, and CSDA operator's field kit with CSDA Safety Handbook, Pocket Reference Guide, calculators, ruler, and 10x magnifier. **Space is limited to 25 participants, so register early!**

CSDAWTH Fee: \$785

CSDA Concrete Polishing

Presented by the Concrete Sawing and Drilling Association.



Course Code: CSDAPWTH

Date/Time: Wednesday - Thursday, January 18 - 19 | 8:00 am – 5:00 pm

Location: LVCC North Hall

Course Content: This two-day course will provide an overview of the concrete polishing industry and fundamentals of concrete, diamond tool technology, diamond selection process, practical applications and maintaining polished surfaces. Introduction into various types of concrete grinders, hand polishers, vacuum systems, burnishers and auto scrubbers including their applications and components; diamond selection and abrasive pad selection; how diamonds work with each type of grinder; training regarding set-up, operation and troubleshooting. Wet and dry concrete polishing will be discussed. Final 2 hours of the course will address estimating and bidding.

IMPORTANT: All students are advised to wear/bring sturdy work boots and safety glasses for the outdoor demo portions of the class. **Space is limited to 48 participants, so register early!**

CSDAPWTH Fee: \$785

Questions about these programs should be directed to Erin O'Brien with CSDA.

Ph: 727-577-5004 or email erin@csda.org. For more information about CSDA go to www.csda.org.

NEW! Concrete Estimator's 2-Day Workshop

Presented by Frank R. Walker and Builder's Estimating & Exam School.



Course Code: MTCEW

Date/Time: Monday – Tuesday, January 16 – 17 | 8:00 am – 4:30 pm

Location: LVCC North Hall

This popular course is designed to improve the skills and knowledge of an estimator. The course is open to all WOC attendees and can help veteran estimators with tips & shortcuts and help novice estimators with almost no experience.

A review of basic math (lineal feet, area formulas, & volume), blueprint reading (foundation plan, section views, & detail drawings), and estimating procedures for completing an estimate will be covered. Various practice problems will be completed throughout the workshop. Material and labor costs will be presented utilizing the Walker's Building Estimator's Reference book. The second day will include working from a set of working drawings. Participants will develop a memory sheet, an order sheet and a worksheet to complete a detailed estimate of concrete, reinforcing steel, anchor bolts, dowels, chairs, vapor barrier, and rigid insulation.

NOTE: Registration includes lunch and synopsis booklet. Bring a calculator to class.

MTCEW Fee: \$650; \$750 after 12/1/16 and onsite

Questions about the estimating workshop should be directed to info@frankwalker.com or 800-458-3737.

CICFI & ICFBG ICF Summit

Tuesday – Thursday, January 17 – 19 | 10:30 am – 12:00 pm

2-Day Basics or Advanced ICF Summit Package: \$160 (or select individual sessions below)

NEW! Introduction to ICFs

Presented by the Council of ICF Industries and the ICF Builder Group.

Course Code: TUICF

Date/Time: Tuesday, January 17 | 10:30 am – 12:00 pm

Location: LVCC North Hall

This new interactive training course is designed for contractors who are new to Insulated Concrete Forms. A team of expert teachers will demonstrate basic installation procedures, including getting the first row started correctly, how to deal with corners, and how to install window and door openings. Discussions will also include a brief overview of bracing and pouring requirements. Attendees will have an opportunity to handle and work with ICF materials being demonstrated.

TUICF Fee: \$90



NEW! ICF Complete Solution for Disaster Resilience

Presented by the Council of ICF Industries and the ICF Builder Group.

Course Code: WEICF

Date/Time: Wednesday, January 18 | 10:30 am – 12:00 pm

Location: LVCC North Hall

Increase the market appeal of your projects by "building even stronger" with insulated, reinforced concrete. Intended for contractors already building with ICFs, this course will cover how to create enhanced resilience against tornadoes, wildfires, and hurricanes or other coastal storms. Learn how to market your ICF business successfully.

WEICF Fee: \$90



NEW! ICF Mid-Rise Buildings

Presented by the Council of ICF Industries and the ICF Builder Group.

Course Code: THICF

Date/Time: Thursday, January 19 | 10:30 am – 12:00 pm

Location: LVCC North Hall

This new session is a builder-to-builder discussion for experienced ICF installers. Four panelists—each known for pushing the ICF envelope—will briefly share their insights and experiences with the construction and design of ICF mid-rise buildings. An open forum with a question-and-answer session will focus on best practices for this important ICF market segment that is expected to grow exponentially over the next 5-10 years.

THICF Fee: \$90



NOTE: Save when purchasing one of the 2-day packages below before Dec 1st:

ICF Summit 2-Day Basics Package [TWICF]: \$160 on or before 12/1/16

(includes TUICF and WEICF individual sessions above; regular pricing of \$90 each after 12/1/16)

ICF Summit 2-Day Advanced Package [WTICF]: \$160 on or before 12/1/16

(includes WEICF and THICF individual sessions above; regular pricing of \$90 each after 12/1/16)

Questions about ICF courses should be directed to Andy Lennox with CICFI, andylennox12@gmail.com or phone 705-928-3779. For more information about CICFI or ICFBG go to www.cicfi.org and www.icfbuildergroup.com

ICPI Certified Concrete Paver Installer (CCPI) Course

Presented by the Interlocking Concrete Pavement Institute.

Course Code: ICPITW

Date/Time: Tuesday - Wednesday, January 17 – 18 | 8:00 am – 5:00 pm

Location: LVCC North Hall



This two-day course equips contractors with classroom training to properly install interlocking concrete paving systems according to industry established guidelines. Job planning, soil characteristics, compaction, base materials, bedding and joint sands, concrete paver installation and maintenance are covered plus safety, estimating, job costing and contract basics.

Who Should Attend: Contractors involved in residential and commercial installation of interlocking concrete pavements with a year or more of experience, those interested in learning about best practices for the construction of concrete paver installation systems, and those interested in completing the Concrete Paver Installer Certification.

Course Content: job planning and layout, estimating, soil and site characteristics, sub-base and base materials, edge restraints, bedding and jointing materials, paver selection, installation and maintenance.

Please note: Registration includes a student manual and exam. Lunch is on your own. Those who pass the exam receive a Record of Completion. To be a certified installer, documentation regarding installation experience is required. Please look for the information on the ICPI website under the "Education & Certification" tab.

ICPITW Fee: \$350

ICPI Members should contact ICPI for member rebates, in writing, after the show.

*Questions about this program should be directed to ICPI. Ph: 703-657-6900 or email aplana-hutt@icpi.org.
For more information on the Concrete Paver Installer Certification visit <http://www.icpi.org/certification>.*

ICRI Concrete Slab Moisture Testing Demonstration & Workshop

Presented by the International Concrete Repair Institute.

Course Code: ICRITH

Date/Time: Thursday, January 19 | 8:00 am – 11:00 am

Location: Back of LVCC South Hall



Individuals who want to register for the Tier 2 Program (THRPE) without pre-approved previous hands-on concrete slab moisture testing experience, or individuals who wish to enhance their slab moisture testing ability, may take the *optional* Concrete Slab Moisture Testing Demonstration & Workshop. Four ASTM tests will be demonstrated with opportunity for hands-on testing and training by ICRI instructors or judges. Participation in this session will fulfill the requirement of pre-approved previous hands-on slab moisture testing experience necessary for acceptance into the full certification performance exam (THRPE).

ICRITH Demo/Wkshp Fee: \$195

*For questions and to receive approval to take the hands-on Performance Exam, **and receipt of Approval Code**, please contact Ken Lozen, ICRI Technical Director, **prior to registering** at 248.358.6996 or via email kenl@icri.org*

MCAA Masonry Foreman Development Program

Presented by the Mason Contractors Association of America.

Course Code: FDSM

Date/Time: Sunday - Monday, January 15 - 16 | 8:00 am – 4:00 pm

Location: LVCC North Hall



This course is a must for any new or potentially new foreman for your job-site. The course receives fantastic reviews every year and the information and education discussed is priceless for any new or upcoming foremen. Topics range from project management to interpersonal skills and just about everything in between.

FDSM Fee MCAA Member: First Member **\$650**; Additional members (same company reg) **\$600**

FDSM Fee Non-member: First Registrant **\$800**; Additional registrants (same company reg) **\$750**

NEW! MCAA Silica Train-the-Trainer Course

Presented by the Mason Contractors Association of America.

Course Code: STTTU

Date/Time: Tuesday, January 17 | 9:00 am – 12:00 pm

Location: LVCC North Hall



OSHA rolled out the new silica rule in 2016. One of the components of the rule is to have a competent person on each job-site. This course will train someone on your staff to train other competent people on your staff. The class will focus on the required written program of the new rule and show attendees the essentials to pass along to the foreman who will be competent people on your job sites. This course is brand new. A competent person on the topic of silica will be required on all jobsite by June 23, 2017. This would be a great class for attendees doing the foreman development course or for any safety personnel.

STTTU Fee MCAA Member: First Member **\$225**; Additional members (same company reg) **\$200**

STTTU Fee Non-member: First Registrant **\$325**; Additional registrants (same company reg) **\$300**

NEW! MCAA Storm Shelter Program

Presented by the Mason Contractors Association of America.

Course Code: SSPTH

Date/Time: Thursday, January 19 | 8:00 am – 2:00 pm

Choose 5-Series Certification or select preferred individual 1-hour topics.

Location: LVCC North Hall



This brand new program is a credential program that will show the end user and designers that your company is serious when it comes to proper installation of a high wind storm shelter. The program was created partially in response to the new code requiring schools to have storm shelters in them. Focus groups of both end users and designers had concerns about the masonry system versus pre-fabricated competitors essentially focused on the issue of proper means and methods of installation. This program is broken down into 5 different topics.

- [SSPTH1] Introduction and background, 8:00 am – 9:00 am
- [SSPTH2] Anchoring dowels, 9:00 am – 10:00 am
- [SSPTH3] Proper Placement and Masonry Grouting, 10:00 am – 11:00 am
- [SSPTH4] Connections, 11:00 am – 12:00 pm
- [SSPTH5] Quality Control and Assurance, 1:00 pm – 2:00 pm

When all 5 courses are completed the participant will become a CSSI credential (Credentialed Storm Shelter Installer). The courses are specifically designed for the installer and cover every facet critical to the successful installation of a storm shelter. Classes can be taken as a series or individually. Upon completion of all 5 programs a certificate will be mailed to the participant as well as a card.

SSPTH 5-Series Certificate Fee: First Registrant **\$600**; Additional registrants (same company reg) **\$400**

SSPTH (1-5) Individual Topic Fee: First Registrant **\$150**; Additional registrants (same company reg) **\$100**

MCAA Masonry Wall Bracing

Presented by the Mason Contractors Association of America.



Course Code: WBPTH

Date/Time: Thursday, January 19 | 9:00 am – 12:00 pm

Location: LVCC North Hall

The Masonry Wall Bracing Course has been developed to provide contractors with the know-how to confidently design and construct bracing for a variety of common masonry structures. This is an opportunity to save your company money by designing your own wall bracing rather than paying a structural engineer.

This course is intended to teach project managers, safety managers, foremen and any other responsible person to understand and implement the OSHA regulation on wall bracing and the Standard Practice for Bracing Masonry Walls. Completion of this course will allow your people to safely and efficiently design adequate masonry wall bracing. Why pay an engineer for a design that you can do yourself?

WBPTH Fee MCAA Members: First Member **\$225**; Additional Members (same company reg) **\$175**

WBPTH Fee Non-members: First Registrant **\$275**; Additional Registrants (same company reg) **\$225**

Cancellation Policy: Registrants will receive a full refund up to 30 days before MCAA event date. *NO REFUNDS will be issued after December 16, 2016 without a specific medical condition that can be backed up with documentation. A \$25 administrative fee will be applied to any cancelled MCAA educational session and/or event.*

Questions about the MCAA programs should be directed to MCAA at 800-536-2225.

For more information, go to www.masoncontractors.org.

PCI Quality Control Technician/Inspector Certification Level I

Presented by the Precast/Prestressed Concrete Institute.

Course Code: PCI1

CLASS Date/Time: Monday, January 16 | 8:00 am – 5:00 pm

EXAM Level I Date/Time: Tuesday, January 17 | 8:00 am – 9:00 am

Location: LVCC South Hall



Level I begins the series of exciting quality control schools and starts off with a review of PCI certification programs, both plant and personnel. The curriculum was developed especially for industry quality control personnel, engineers, technician/managers, plant managers/superintendents and consulting engineers. However, the schools and certifications are open to everyone involved in planning, operations and quality control in the precast products industry.

Basic concrete topics and mix design concepts (such as the water/cementitious ratio) are introduced as well as beginning design concepts such as concrete strength, the need for reinforcement and conventional reinforcing bars. Attendees will receive a copy of the valuable Quality Control Technician/Inspector Level I & II Training Manual (TM-101) plus class notes and extensive reference material. Level I is a one-day course followed by a written examination the next morning.

PCI1 Certification Fee: \$595 (includes Level I exam)

PCI Quality Control Technician/Inspector Certification Level II

Presented by the Precast/Prestressed Concrete Institute.

Course Code: PCI2

CLASS Date/Time: Tuesday, January 17 | 10:00 am – 5:30 pm

EXAM Level II Date/Time: Wednesday, January 18 | 8:00 am – 11:00 am

LVCC South Hall



The curriculum continues at Level II with intermediate concrete topics and mix design concepts. Prestressing is introduced - attendees run calculations and discuss correction factors. The Level I & II program is packed with activities: round-table discussions, practice sessions, student-instructor interaction and certification examinations.

Attendees will receive a copy of the valuable Quality Control Technician/Inspector Level I & II Training Manual (TM-101) plus class notes and extensive reference material. Level II is a one-day course followed by the examination the next morning.

NOTE: Level I certification is a prerequisite for Level II. If you do not currently hold a Level I certification, you must register for both the Level I and Level II courses (PCI3) to attend.

PCI2 Certification Fee: \$595 (includes Level II exam)

PCI Quality Control Technician/Inspector Certification Levels I & II

Presented by the Precast/Prestressed Concrete Institute.

Course Code: PCI3

Date/Time: Monday, January 16, 8:00 am – Wednesday, January 18, 11:00 am

Mon, Jan 16, 8am - 5pm | Tues, Jan 17, 8am - 5:30pm | Wed, Jan 18, 8am - 11am

Location: LVCC South Hall

NOTE: *Special discounted package that includes Level I and Level II training with examinations.*

PCI3 Certification Fee: \$995 (includes both Level I and Level II exams)

PCI Certified Field Auditor Training & Certification (CFA)

Presented by the Precast/Prestressed Concrete Institute.

Course Code: (PCICFA)

Date/Time: Monday – Tuesday, January 16 – 17 | 8:00 am – 5:00 pm

Wednesday, January 18 | 8:00 am – 4:00 pm

Location: LVCC South Hall



Today's business environment demands a high degree of training and certification, both for precast concrete production in the plant and subsequent erection in the field. This program is a practical presentation of precast concrete erection industry standards, issues and expectations. It provides a unique opportunity to interface with peers to discuss common issues and share solutions and successes.

The CFA Program will:

- Provide a means for erection personnel to demonstrate proficiency
- Reinforce quality standards for erection personnel
- Teach industry erection standards to erection personnel
- Provide a means of helping personnel to develop skills and credentials
- Enable erectors to challenge employees to grow in their knowledge
- Teach and certify qualified persons to audit, evaluate and report precast concrete field erection activities according to PCI standards

The CFA class is packed with activities: round-table discussions, student-instructor interaction and certification examinations. CFA students will receive copies of the PCI Erector's Manual (MNL-127) and the PCI Erection Safety Manual for Precast and Prestressed Concrete (MNL-132) plus class notes and extensive reference material.

Attendees who pass all three examinations with a score of 80% or higher will receive an official CFA certification, a wall certificate, wallet cards and a unique certification number assigned to them.

NOTE: Attendees must complete all three days of training and pass all exams in order to be certified.

PCICFA Fee: \$995 (CFA and IES) (WOC attendees receive special PCI member pricing)

PCI Certified Company Auditor Training & Certification (CCA)

Presented by the Precast/Prestressed Concrete Institute.



Course Code: PCICCA

Date/Time: Thursday, January 19 | 8:00 am – 4:00 pm

Location: LVCC South Hall

Design especially for CFA's, the Certified Company Auditor (CCA) course prepares individuals to audit the work of other CFA's. The CCA course endeavors to review:

- Concepts of quality and quality assurance
- Importance of field quality control
- Role of the Certified Company Auditor
- Defined body of knowledge
- Importance of an effective safety plan
- Components of a safety plan
- How to conduct a Company Quality Audit

NOTE: Attendees must hold a valid CFA (Certified Field Auditor) certification or be registered for the PCICFA course at the World of Concrete.

PCICCA Fee: \$300 (WOC attendees receive special PCI member pricing)

Questions about these programs should be directed to Alex Morales with PCI.

Ph: 312-360-3219 or Email AMorales@pci.org. For more information on PCI go to www.pci.org/schools.

SAIA Competent Person Training – Frame Scaffold

Presented by the Scaffold & Access Industry Association.

Course Code: SAIATU

Date/Time: Tuesday, January 17 | 7:30 am – 4:30 pm

Location: LVCC North Hall



This program is designed for scaffold erectors and covers all the safety aspects regarding frame scaffold foundations, scaffold components, regulations, guardrail requirements, and erection and dismantling procedures for frame scaffolds that exceed the standard height to base ratio. The course format includes a combination of presentation, question and answer, a hands-on component and final exam.

Participants who score 70% or higher on the Competent Person written exam and display competency building frame scaffolding will receive a certificate of completion and wallet card from the SAIA Training Program, certifying completion of Competent Person Training in the erection of frame scaffolds. Those not meeting a 70% on the final exam will receive a certificate completion and wallet card for the Hazard Awareness training.

- The Course includes the training manual, *Competent Person Training: Frame Scaffold*, with self-test questions for each chapter.
- The chapter self-tests, are included in the manual. The final exam is largely based on the questions within each self-test and it is important that students correctly answer all the self-test questions. The correctly completed self-test questions become a very useful study guide to prepare for the final exam.

How to prepare: We recommend that you register early in order to allow yourself plenty of time to study. It is absolutely necessary that participants read the textbook and complete all self-tests. **Please bring the textbook on the day of the class for review.**

NOTE: A competent person designation is expired if older than 3 years old; you can re-certify at this course.

SAIATU Fee: \$300

SAIA Competent Person Training – Suspended Scaffold

Presented by the Scaffold & Access Industry Association.

Course Code: SAIawe

Date/Time: Wednesday, January 18 | 7:30 am – 4:30 pm

Location: LVCC North Hall



This program is designed for suspended scaffold users and covers all the safety aspects regarding suspended scaffold stages, ropes, regulations, guardrail requirements, fall protection, hoists and installation components. The course format includes a combination of presentation, question and answer, and final exam.

Participants who score 70% or higher on the Competent Person written exam will receive a certificate of completion and wallet card from the SAIA Training Program, certifying completion of Competent Person Training with Suspended Scaffold.

- The Course includes the training manual, *Safety Training for Suspended Scaffolds*, with self-test questions for each chapter.
- The chapter self-tests, are included in the manual. The final exam is largely based on the questions within each self-test and it is important that students correctly answer all the self-test questions. The correctly completed self-test questions become a very useful study guide to prepare for the final exam.

How to prepare: We recommend that you register early in order to allow yourself plenty of time to study. It is absolutely necessary that participants read the textbook and complete all self-tests. **Please bring the textbook on the day of the class for review.**

NOTE: A competent person designation is expired if older than 3 years old; you can re-certify at this course.

SAIAWE Fee: \$300

Questions about these programs should be directed to Granville Loar with SAIA.

Ph: 816-595-4860 or Email granville@saiaonline.org.

For more information on SAIA go to www.saiaonline.org.

Self-Consolidating Concrete Today Presentation & Forum

Presented by Euclid Chemical.

Course Code: MOSCC

Date/Time: Monday, January 16 | 1:00 pm – 4:30 pm

Location: LVCC North Hall



EUCLID CHEMICAL

This presentation will highlight the advantages using self-consolidating concrete (SCC) for all types of concrete applications, the rapid increase of SCC use on cast-in-place concrete construction projects in the America's, and SCC specifications for architectural concrete, heavily reinforced members, and poured repairs. Discussions will include jobsite productivity, improved final wall surface appearance, and safety & risk management for workers who regularly vibrate concrete during placement.

During SCC Today – ***A Day in the Life of an SCC Project***, several recent projects will receive formal recognition. Contractors involved in the success of these featured projects will be recognized and share their successful incorporation of SCC. Presentations will contain technical content and focus on idea exchange providing attendees a unique opportunity to share concerns and opportunities related to self-consolidating concrete use in construction.

Topics include: mix design preparation for submittals; pumping solutions; on-site quality control; formwork use; formed surface quality assessment, job site productivity, and employee safety.

MOSCC Fee: \$100; \$135 after 12/1/16 and onsite

Questions about this session should be directed to Bill Phelan, euclidchem@att.net or 732-390-9770.

TOURS

Hoover Dam & Bypass Bridge Tour

Course Code: HDS

Date/Time: Sunday, January 15 | 12:30 pm - 5:30 pm

Course Code: HDF

Date/Time: Friday, January 20 | 12:00 pm - 5:00 pm

Location: LVCC North Hall, Room N119

Bus pick up/drop off: Door 9 at Concourse 5, end of Grand Concourse

Join Rick Yelton, World of Concrete's Editor at Large, on a visit to two of the world's most famous concrete structures, Hoover Dam and Bypass Bridge. Behind the scenes information will be shared on how these concrete structures, built more than 50 years apart, played an important part in the development of new standards in concrete construction.

Attendees will meet for a brief orientation and special presentation about the construction of the Mike O'Callaghan–Pat Tillman Memorial Bridge, the largest concrete arch bridge in the United States. Discussions will cover engineering challenges, crane work, concrete mix designs, and how the contractor accomplished this special project.

On the 30-minute drive to the Bridge & Dam area, local docents provide general information on the histories of the Las Vegas and Boulder City areas. While at the Bridge's Visitor Center, attendees can view displays as well as take in the breathtaking view of the Dam from the Bridge's pedestrian walkway. Note: The walk is either up approximately 200 stairs or an inclined path; winds on the pedestrian walkway overlooking the Dam can be brisk.

Next stop is the Hoover Dam Visitors Center where attendees can visit the Visitors Center's Museum and view the Bridge from an overlook. If operational, guests can take the Hoover Dam Power Plant Tour led by Reclamation guides which includes a 70-second elevator ride down 530 feet through the rock wall of Black Canyon for a 30-minute guided tour into a tunnel drilled in the 1930s for construction plus a short walk to the Penstock Viewing Platform.

- Penstock Viewing: atop one of the huge 30-foot-diameter pipes that transport nearly 90,000 gallons of water each second from Lake Mead to the dam's hydroelectric generators.
- Power Plant Generators: elevator ride up to the Nevada power plant balcony for panoramic view of the 650-foot-long Nevada wing and eight of the dam's 17 huge generators.

Registration includes classroom presentation, bus transportation w/docents, paid admission to the Hoover Dam Visitor Center, and a boxed lunch. **Book early for this 'always sold out' excursion!**

Hoover Dam & Bypass Bridge Tour Fee: \$110; \$140 after 12/1/16 and onsite

Questions about the tour should be directed to contactus@worldofconcrete.com.

BREAKFASTS

Breakfast with the Experts at World of Concrete

Sponsored by BASF Corporation.

Course Codes: TUBE, WEBE, THBE [1-2]

Date/Time [1]: Tuesday - Thursday, January 17 – 19 | 6:45 am - 7:45 am

Date/Time [2]: Tuesday – Thursday, January 17 – 19 | 8:15 am - 9:15 am

LVCC North Hall

Rise and shine! Get answers to your most vexing questions from concrete industry experts in an intimate and open setting – choose from two time slots, 6:45 am or 8:15 am.

Sponsored by BASF Corporation, Breakfast with the Experts provides attendees peer-to-peer opportunities each show morning to pose their questions on technical problems to leading concrete industry experts.

A panel of concrete industry experts will offer solutions to questions on problems affecting both new concrete construction and concrete repair. Content provided in sessions will differ based upon questions posed by attendees.

This is an industry networking event presented in a relaxed setting. Each session's question selection and discussion is designed to provide attendees a unique opportunity to share concerns and business opportunities on current topics affecting production, construction, repair, and maintenance on concrete projects.



NOTE: The registration fee includes a hot breakfast; attendees can opt for a discounted package fee of \$95 for all 3 mornings - see code TWTBE (1-2).

Individual Breakfast Fee: \$35 per morning session; \$45 after 12/1/16 and onsite

TWTBE1 (6:45-7:45) & TWTBE2 (8:15-9:15): Discounted 3-Day Pass \$95; \$115 after 12/1/16 and onsite

Questions about the breakfast should be directed to contactus@worldofconcrete.com.

LUNCHEONS

Concrete Polishing Luncheon & Forum

Presented by Concrete Surfaces magazine in cooperation with the ASCC Concrete Polishing Council.

Concrete
SURFACES



Course Code: TUCPL

Date/Time: Tuesday, January 17 | 11:30 am - 1:30 pm

Location: LVCC South Hall

How to Protect, Maintain, Troubleshoot, and Restore Polished Concrete Floors

Polished concrete floors are not maintenance free, despite what many owners have been told; they may even need more (or different) maintenance than other floors. At this forum, polishing experts will explore what the owner should be told to do to keep their polished floor looking its best. What things can damage a polished floor (improper cleaning products, dirt, foot traffic, deicing chemicals, oil) and what is the effect of this abuse on the floor? When evaluating a polished floor that has not met expectations, how can the contractor determine the causes of any damage? What are the best ways to restore a polished floor that has lost its luster? How can a polishing contractor make money off maintenance and restoration?

Come to the Concrete Polishing Luncheon & Forum to learn all the answers! Speakers: A polishing contractor and a floor maintenance representative will be joined by a specialty repair/restoration contractor to address important issues.

TUCPL Luncheon Fee: \$85; \$105 after 12/1/16 and onsite; \$75 with purchase of Super Pass

Quality in Concrete Slabs Luncheon & Forum

Presented by Concrete Construction magazine in cooperation with the American Society of Concrete Contractors.

CONCRETE
CONSTRUCTION
The World of Concrete



Sponsored by Ligchine International, Multiquip, Stego Industries, and Wagner Meters.



Course Code: WESOG

Date/Time: Wednesday, January 18 | 11:30 am - 1:30 pm

Location: LVCC South Hall

What Does the Owner Expect Today? Has it changed?

As concrete floors have improved in terms of flatness, joint durability, joint spacing, and floor finish, have owners changed their expectations? Do owners have a clear vision of what is needed for a specific application or do they expect a near-superflat floor when they are specifying and paying for something much less? Do expectations, specifications, and price align? Do they expect extended joint spacing without paying for the materials and techniques to make that successful? Do they have a reasonable expectation of how long it will take the floor to dry so impermeable flooring can be installed? How can the place-and-finish contractor have input on the specifications? Come to the slabs luncheon to explore these issues in depth with owner representatives and top floor slab contractors.

WESOG Luncheon Fee: \$85; \$105 after 12/1/16 and onsite; \$75 with purchase of Super Pass

Questions about above polishing and slab luncheons can be directed to Bryan Rippeon, brippeon@hanleywood.com.

NEW! Steel-Fiber Reinforced Concrete Floors Luncheon & Forum

Sponsored and presented by Bekaert Corporation.

Course Code: THBSL

Date/Time: Thursday, January 19 | 11:30 am - 1:30 pm

Location: LVCC North Hall



Profit by Using Steel-Fiber Reinforced Concrete in Unique Applications.

Learn from the experts how you can use steel-fiber reinforced concrete to solve tough floor and structural challenges. Engineers and contractors are employing jointless steel-fiber reinforced floors, slabs with no saw cuts known as seamless floors, floors on piles plus many other applications. This luncheon forum will also discuss how to construct other structures including mat slabs with steel fibers.

Quality control is an important element in seamless floor construction. Verifying proper fiber disbursement in fresh concrete is difficult. Experts will report on a new quality control tool to measure steel-fiber dispersion that could replace wash-out tests and provide continuous, instantaneous data during placement. Attendees will learn how to:

- Expand their existing market with industrial seamless floors and structures
- Propose and construct steel-fiber reinforced structural floors
- Improve a seamless floor's as-built quality by using magnetic resonance imaging to reveal exact steel fiber dosage in fresh concrete

THBSL Luncheon Fee: \$85; \$105 after 12/1/16 and onsite; \$75 with purchase of Super Pass

*Questions about this steel-fiber luncheon can be directed to Ganesh Chaudhari,
ganesh.chaudhari@bekaert.com or 404-952-0040.*