

**NOTE: Space is limited on all training, workshops, & live demonstrations, so register early!**

## HANDS-ON TRAINING: Mix Design & Testing Labs

**Course Codes:** TUMD1-3, WEMD1-3

**Dates/Times:** Tues – Wed, Feb 4 – 5, 8:00am – 4:30pm

**Trainers:** John Schemmel, Tom Greene

**Location:** LVCC Central Hall, Concourse 5

This beginner hands-on training experience consists of two laboratory stations: 1) Materials & Mix Design and 2) Field Quality Control. In the first station, participants will identify and examine individual materials commonly used in concrete including aggregates, cement, fly ash, slag, and silica fume. Hear how the various materials influence both fresh and hardened concrete properties. In addition, learn about chemical admixtures and watch tabletop demonstrations showing how these admixtures work. Attendees will mix a small batch of concrete to understand how materials and their proportions influence the properties of concrete.

The second part of this hands-on session will focus on proper methodologies for testing fresh concrete in the field with demonstration of tools used to measure fresh concrete properties. Laboratory activities will include slump cone, density measure, air content by pressure meter, air content by volumetric meter, thermometer, and specimen molds. Participants will also learn about testing tolerances, significance of fresh concrete tests and how testing contributes to the quality control of the project.

**SPECIAL NOTE:** This hands-on training is a great complement to *Concrete Basics I* (Seminar MO01) and *Concrete Mix Design I* (Seminar WE12).

**Select one preferred time slot:** Tues, Feb 4: **TUMD1:** 8am–11:30am  
**TUMD2:** 10am–1:30pm  
**TUMD3:** 1pm–4:30pm  
 Wed, Feb 5: **WEMD1:** 8am–11:30am  
**WEMD2:** 10am–1:30pm  
**WEMD3:** 1pm–4:30pm

**Mix Design & Testing Labs Fee: \$400; \$465** after 12/11/19 and onsite  
 3.5 Continuing Education hours approved for AIA/CES LU, PDH and TCA.

## HANDS-ON TRAINING: Stamped Concrete

**Course Codes:** TUSC1, WESC1, THSC1

**Dates/Times:** Tues, Feb 4, 1:00pm – 5:00pm; Wed - Thurs, Feb 5 - 6, 8:00am – 12:00pm

**Trainers:** Paul Schneider, Kenny Cox

**Location:** LVCC Bronze Lot, Certification/Training Area

Participants will apply the basics of stamped concrete in this hands-on training session. Attendees will place and stamp an area consisting of straight and curved formwork. Applying and working with color hardeners and release agents plus how to properly use stamping tools to create various textures including borders and bands will be experienced. Participants will also practice different jointing and edging techniques as well as washing, cleaning and sealing. Don't miss this opportunity to learn how to create the look of slate or stone by doing it yourself!

This training is a great complement to TU130, *Stamped Concrete: Advanced Techniques and Cutting-Edge Products* presented by Todd Scharich and TH133, *Troubleshooting Common Issues with Decorative Concrete Applications and Finishes* presented by Chris Sullivan.

**IMPORTANT: Minimum age 18 years.**

**Clothing requirements: long pants, long shirt sleeves and work boots. Safety equipment will be provided.**

**Select one preferred time slot:** Tues, Feb 4: **TUSC1** 1:00pm–5pm  
 Wed, Feb 5: **WESC1** 8:00am–12pm  
 Thurs, Feb 6: **THSC1** 8:00am–12pm

**Stamped Concrete Fee: \$475; \$550** after 12/11/19 and onsite  
 4.0 Continuing Education hours approved for AIA/CES LU, PDH and TCA.

## HANDS-ON TRAINING: How to Place & Finish Floors

**Course Codes:** WEPTD1, THPTD1–2

**Dates/Times:** Wed, Feb 5, 1:00pm–5:00pm; Thurs, Feb 6, 8:00am–12:00pm & 1:00pm–5:00pm

**Trainers:** Jeff Groom, Denny Bartz

**Location:** LVCC Bronze Lot, Certifications & Training Area

This 4-hour hands-on-training session is limited to 20 attendees per time slot. Want to get dirty and learn how to place, screed, bull float and power trowel a concrete floor slab? This is not a sit and watch session—you'll be the flatwork finisher! Attendees will be divided into groups of 10 each and each group will place and finish a 12 ft x 30 ft slab under the direction of industry recognized flatwork finishers. Attendees will receive individual instructions and tips on how to use various hand and power tools including hand-held vibratory-screeds, straight edges, bull floats, bump cutters and walk-behind power trowels. Learn about the window of finishability and how to read fresh concrete.

Hands-On Training participants are encouraged to attend seminar TU120, *Introduction to Placing and Finishing Concrete Slabs: Best Practices* for a more complete educational experience.

**Select one preferred time slot:** Wed, Feb 5: **WEPTD1** 1:00pm–5:00pm  
 Thurs, Feb 6: **THPTD1** 8:00am–12:00pm  
 Thurs, Feb 6: **THPTD2** 1:00pm–5:00pm

**IMPORTANT: Minimum age 18 years.**

**Clothing requirements: long pants, long shirt sleeves and work boots. Safety equipment will be provided.**

**Place & Finish Fee: \$475; \$550** after 12/11/19 and onsite

4.0 Continuing Education hours approved for AIA/CES LU, PDH and TCA.

## HANDS-ON TRAINING: Surveying with Total Stations (Basics and Advanced levels offered)

### Basics for Beginners

**Course Codes:** TUSTS1, TUSTS2

**Date/Time:** Tues, Feb 4, 8:00am–12:00pm & 1:00pm–5:00pm

**Trainers:** Dustin Crowther, Travis Houston

**Location:** LVCC North Hall, Room N101

This introductory hands-on training session will explain the basic workings of digital total stations used in surveying with special focus on accuracies, errors and minor adjustments. Instrumental, personal, natural random and systematic errors will be discussed along with procedures for avoiding common pitfalls such as measuring angles and distances. Attendees will be subdivided into small groups to demonstrate/practice the following: instrument setup and proper handling and care of equipment. Attendees will set-up a total station over a specific point using the 5-step method as well as learn to measure distances and horizontal/vertical (zenith) angles properly.

**Select one preferred time slot: TUSTS1:** 8:00am–12:00pm  
**TUSTS2:** 1:00pm–5:00pm

**Basics of Surveying Fee: \$375; \$455** after 12/11/19 and onsite

4.0 Continuing Education hours approved for AIA/CES LU, PDH and TCA.

### Advanced Surveying with Total Stations

**Course Code:** WESTS1

**Date/Times:** Wed, Feb 5, 8:00am–12:00pm

**Trainers:** Dustin Crowther, Travis Houston

**Location:** LVCC North Hall, Room N101

This hands-on training session is designed for experienced operators who already have a good working knowledge and significant practice using total stations in the field. Participants will go beyond what is commonly learned on the job and delve into specifications, accuracies and calibrations which are rarely understood by the typical construction surveyor. Specific detail will be presented on methods which may be utilized to improve accuracy of point location beyond the standard procedures typically used on construction sites.

Hands-on use of total stations will demonstrate easily performed field checks and adjustments of instrument calibration in setting up accurately on a point and measurement of distances and angles. A special discussion

regarding expected accuracies with various degrees of factory stated specifications typically found will also be included.

**IMPORTANT:** Recommended for participants with 1-2 years' experience using total stations.

**Advanced Surveying Fee: \$375; \$455** after 12/11/19 and onsite

4.0 Continuing Education hours approved for AIA/CES LU, PDH and TCA.

## DECORATIVE LIVE DEMONSTRATIONS

### WORKSHOP & DEMONSTRATION: Decorative Overlays

**Course Code:** TUDOD

**Date/Times:** Tues, Feb 4, 1:00pm – 5:00pm

**Trainers:** Brian Farnsworth, Chris Sullivan, Chris Becker

**Location:** LVCC Bronze Lot, Certifications & Training Area

Decorative overlays offer some of the greatest potential when it comes to growing your decorative concrete installation business. The variety of colors and finishes are only now being realized, with large growth potential into the future. This interactive workshop with live demonstrations allows participants to observe various decorative concrete overlay systems in cutting edge and trending finishes. Key focus areas of the class will include moisture mitigation prior to overlay application, hard trowel finishes with stain, specialty knock down finishes, polished self-leveling overlay with accents and vertical thin section overlay application. Workshop participants will see all of these systems and finishes applied with an emphasis on trending colors and design elements as well as long term durability in all climates.

**SPECIAL NOTE:** This workshop and live demo is a great complement to TH133, *Troubleshooting Common Issues with Decorative Concrete Applications and Finishes* presented by Chris Sullivan. **Seminar TH133** registrants will receive **\$20 discount** on TUDOD workshop if purchased by 12/11/19.

**TUDOD Fee: \$325; \$305** when purchased with Seminar TH133 by 12/11/19; **\$375** after 12/11/19 and onsite

4.0 continuing education hours pending approval for AIA/CES LU and PDH.

### WORKSHOP & DEMONSTRATION: Concrete Countertops

**Course Code:** WECCD

**Date/Times:** Wed, Feb 5, 12:30pm – 4:30pm

**Trainer:** Jeff Girard

**Location:** LVCC Central Hall, Concourse 5

Watch a countertop and sink come to life, going from a mold and raw ingredients to polished and colored concrete with exposed aggregate. Attendees will see how a sink mold is constructed, how concrete is mixed, and the consistency adjusted with superplasticizer, how a sink and countertop are cast and then demolded, and the grinding and polishing process. Learn what tools and equipment are needed, such as a mixer and diamond polisher, and see them in action. Also see how pigments, stains, and decorative embedments such as glass, stone and metal can be combined to create myriad looks. Participants will receive a from-scratch mix design and step-by-step handout.

**SPECIAL NOTE:** This workshop and live demo is a great complement to MO129, *GFRC Concrete Countertops: Step-by-Step Process* presented by Jeff Girard. **Seminar MO129** registrants will receive **\$20 discount** on WECCD workshop if purchased by 12/11/19.

**WECCD Fee: \$325; \$305** when purchased with Seminar MO129 by 12/11/19; **\$375** after 12/3/18 and onsite

4.0 continuing education hours approved for AIA/CES LU and PDH.

## WORKSHOP & DEMONSTRATION: Vertical Concrete

**Course Code:** WEVCD

**Date/Times:** Wed, Feb 5, 1:00pm–5:00pm

**Trainers:** Chris Sullivan, Warren Ness, Brian Farnsworth, Jason Ryan

**Location:** LVCC Bronze Lot, Certifications & Training Area

Design possibilities are limitless with vertical decorative concrete finishes. As the vertical concrete industry continues to grow, end users are discovering the value of realistic 3-D custom rock veneers made from durable concrete products. This workshop with live demonstrations allows participants to observe and interact with highly skilled vertical concrete trainers. Participants will leave the class with an understanding of multiple finishes including foam core construction, over wood hand-carved stone with a custom graphic, hand-carved limestone and 3-D micro finish. Multiple coloration and sealing techniques for all vertical finishes will be demonstrated. This workshop and live demonstration will show these systems and finishes applied with an emphasis on trending colors and design elements as well as long-term durability in both interior and exterior settings.

**SPECIAL NOTE:** This workshop and live demo is a great complement to TH133, *Troubleshooting Common Issues with Decorative Concrete Applications and Finishes* presented by Chris Sullivan. **Seminar TH133** registrants will receive **\$20 discount** on WEVCD workshop if purchased by 12/11/19.

**WEVCD Fee: \$325; \$305** when purchased with Seminar TH133 by 12/11/19; **\$375** after 12/11/19 and onsite 4.0 continuing education hours approved for AIA/CES LU, PDH and TCA.

## WORKSHOP & DEMONSTRATION: Acid Staining Applications

**Course Code:** THASD

**Date/Times:** Thurs, Feb 6, 1:00pm–5:00pm

**Trainers:** Federico Jasso, Mauricio Zambrano

**Location:** LVCC Bronze Lot, Certifications & Training Area

Producing a complex design with acid stain is not difficult if you use adequate techniques. Don't miss this Acid Staining Applications workshop with live demonstrations where attendees will observe advanced techniques to create a beautiful scored/stained pattern with 3D features. The full process will be demonstrated starting with a natural grey concrete slab and finishing with application of a protective system. Techniques will include: tracing designs using paper templates, scoring the surface with 4" grinder, masking as a resist to brush marks and hand strokes, applying acid stain using pump sprayer and cheese cloth to create direct and natural manipulation of color fusion (wet-on-wet and wet-on-dry), etching a specific logo design, and applying different protective coatings.

**SPECIAL NOTE:** This workshop and live demo is a great complement to TU131 *Troubleshooting Acid Staining Problems: What to Do When Things Go Wrong* presented by Federico Jasso. **Seminar TU131** registrants will receive **\$20 discount** on THASD workshop if purchased by 12/11/19.

**THASD Fee: \$325; \$305** when purchased with Seminar TU131 by 12/11/19; **\$375** after 12/11/19 and onsite 4.0 continuing education hours approved for AIA/CES LU, PDH and TCA.

## INTERACTIVE WORKSHOPS

### TRAIN-THE-TRAINER: Construction Forklift

**Course Code:** MOCFT

**Date/Times:** Mon, Feb 3 | 8:00am-12:00pm

**Instructor:** Ron Overton

1. Employer must ensure that all employees have been properly trained, tested and evaluated on the safe use of the forklift in accordance with the federal law prior to operating one at work.
2. Operators must be retrained, retested and reevaluated whenever they are involved in an accident, near miss or observed operating unsafely.
3. All operators must be reevaluated every three years by the employer on their safe use of the forklift trucks.

In this 4-hour trainer workshop, employers' attendees will receive a complete in-house qualification program and training on how to implement. Participants will become authorized as in-house instructors to teach rules/regulations on how to properly inspect and operate class 1, 2, 3, 4, 5 & 7 forklift trucks (including tele-handers or reach trucks,

warehouse trucks and pallet jacks). This program will assist employers in complying with the Federal Law requiring qualified forklift operators in your facilities and/or on the jobsite.

Participants will receive Trainer's Kit (valued at \$395) containing Trainer's Manual, PowerPoint presentation & script, practice quizzes with grading keys, practical evaluation forms, six forklift safety posters, twenty 32-page student handbooks and a tote bag.

**MOCFT Fee: \$695; \$775** after 12/11/19 (Regularly \$895)

4.0 continuing education hours approved for AIA/CES LU, PDH and MCAA.

### TRAIN-THE-TRAINER: Aerial Work Platform

**Course Code:** MOAWP

**Date/Times:** Mon, Feb 4, 1:00pm - 5:00pm

**Instructor:** Ron Overton

1. Employer must ensure that all employees have been properly trained, tested and evaluated on the safe use of the Aerial Work Platform in accordance with federal law prior to utilizing one at work.
2. Employees must be retrained, retested and reevaluated whenever they are involved in an accident, near miss or observed operating unsafely.
3. Fall protection requirements for Aerial Work Platforms must be covered with each employee.

In this 4-hour trainer workshop, employers' attendees will receive a complete in-house qualification program and training on how to implement. Participants will be authorized to use these materials as in-house instructors to effectively train and evaluate their own employees on the rules and regulations for inspection and operation of Aerial Work Platforms as required by Federal OSHA.

Participants will receive the Trainer's Kit (valued at \$395) which contains Trainer's Manual and training script, PowerPoint presentation, reproducible forms on USB flash drive (forms, knowledge check quizzes, practical evaluation forms, ID card template), 20 student handbooks and a tote bag.

**MOAWP Fee: \$695; \$775** after 12/11/19 and onsite (Regularly \$895)

4.0 continuing education hours approved for AIA/CES LU, PDH and MCAA.

### TRAIN-THE-TRAINER: Fall Protection

**Course Code:** TUFPT

**Date/Times:** Tues, Feb 4, 8:00am - 12:00pm

**Instructor:** Ron Overton

**URGENT NOTICE:** Employers must ensure that all employees who are exposed to any falling hazard are trained, qualified and have demonstrated and verified ability to recognize falling hazards, understand the protection system in place, inspect their PFAS, and utilize it correctly and safely. (Proof of training and/or qualification must be available to OSHA upon request.)

1. Employer must ensure that all employees exposed to any falling hazard have been properly trained, tested and evaluated on the safe use of chosen fall protection system being utilized, prior to utilizing it for work.
2. All employees exposed to falling hazards should be refresher-trained and/or re-evaluated as employer deems necessary by their performance in the inspection and use of the fall protection system chosen to be utilized by the employer.

In this 4-hour trainer workshop, employers' attendees will receive a complete in-house qualification program and training on how to implement. Participants will become authorized as in-house instructors to teach your end-user the rules/regulations and techniques of how to properly recognize fall hazards, inspect and use the fall protection system chosen by the employer to mitigate the falling hazard.

Participants will receive Trainer's Kit (valued at \$695) containing Trainer's Manual, PowerPoint presentation & script, practice quizzes with grading keys, practical evaluation/checklist forms, 160-page competent person reference manual, ten 90-page student workbooks and a tote bag.

**TUFPT Fee: \$845; \$945** after 12/11/19 and onsite (Regularly \$1295)

4.0 continuing education hours approved for AIA/CES LU, PDH and MCAA.

## TRAIN-THE-TRAINER: Rigging & Signaling for Cranes

**Course Code:** TURSS

**Date/Time:** Tues, Feb 4, 1:00pm - 5:00pm

**Instructor:** Ron Overton

**URGENT NOTICE:** The Federal OSHA Construction Crane Rule requires employers to ensure that persons who rig loads or provide signaling or spotting for craning are qualified persons who have been trained, passed a written knowledge verification and evaluated in accordance with the regulation.

In this 4-hour trainer workshop, the employers' attendees will receive an in-house qualification program and training on how to implement. Participants will become authorized as in-house instructors to effectively train their own employees on how to recognize the hazards of working around cranes, the rules/regulations on how to properly select, inspect and utilize basic rigging as well as signaling/spotting for overhead hoisting as required by Federal OSHA.

1. Train own employees on a construction site on the hazards of working around cranes and the new rules for energized power line clearances
2. Qualify their own employees as riggers to detach, attach or rig loads for cranes
3. Identify qualified signal persons and spotters to provide signals for crane operations or spot for crane clearances
4. Ensure that their own employees have been trained, tested and evaluated to perform the tasks involved

Participants will receive the **Trainer's Kit** (valued at \$695) which contains Trainer's Manual and training script, PowerPoint presentation, reproducible forms on USB flash drive (forms, knowledge check quizzes, workshop demonstration checklist forms, ID card template), 1 Riggers Handbook, Crane Hand Signal posters, 10 Crosby user lifting guides, 10 pocket crane hand signal cards, 10 student handbooks and a tote bag.

**TURSS Fee: \$845; \$945** after 12/11/19 and onsite (*Regularly \$1295*)

*4.0 continuing education hours approved for AIA/CES LU, PDH and MCAA.*

## LEADERSHIP WORKSHOP: Effective Field Communications

**Course Code:** MOLW1

**Date/Times:** Mon, Feb 3, 8:00am - 12:00pm

**Instructor:** Brad Humphrey

Communication, especially on the job site is crucial to get the job done and get it done right. Field leaders realize that words do matter as communication makes up more than 80% of what Field Leaders execute daily. Field Leaders will learn how to more effectively communicate their intention and purpose while also learning how to better understand the same from those whom they work with on projects. In This workshop learn to make your "site talk" count, spend less wasteful time discussing issues without resolution and target to strengthen your clarity, intentions, and professionalism as a Field Leader.

- Establish ways clearly communicate expectations and request the same from others
- Identify how to adjust communication effort to profile needs of other leaders and employees
- Outline the four steps to maintain professional calm when interacting with hostile others
- Initiate follow-up techniques to confirm that the message is received, understood and intentional

**MOLW1 Fee: \$325; \$375** after 12/11/19 and onsite

*4.0 continuing education hours approved for AIA/CES LU, PDH, MCAA and TCA.*

## LEADERSHIP WORKSHOP: Field Planning and Execution

**Course Code:** MOLW2

**Date/Times:** Mon, Feb 3, 1:00pm - 5:00pm

**Instructor:** Brad Humphrey

Did you realize that just 5-15 minutes more, per day, of planning, can improve your quality, safety, and profits? No bad jobs can happen but not without tremendous field planning & execution. This workshop offers insights to sharpen your planning, organizing and execution skills. For the Construction Field Leader, becoming proficient at planning and executing schedules and work processes may be more critical than being the master craftsman alone.

- Gain hands-on insights to prepare a pre-start mental preparation
- Recognize eight productivity wastes and how to reduce their impact to time, quality and safety
- Outline ways to account for every crew members plan and directions to execute their plan each day
- Develop a checklist of what is required to ensure every tool, piece of equipment, material and component are accounted for before leaving

**MOLW2 Fee: \$325; \$375** after 12/11/19 and onsite

*4.0 continuing education hours approved for AIA/CES LU, PDH, MCAA and TCA.*

## CONCRETE ESTIMATORS WORKSHOP: Strategies & Risk Management Techniques

**Course Code:** TUCEW

**Date/Times:** Tues, Feb 4, 8:00am - 12:00pm

**Instructors:** Rocky Geans, Tommy Ruttura

This new and customized workshop is designed to improve the understanding of the estimating process and its nuances. Attendees will learn to improve their accuracy and decrease risks associated with estimating and the proposal process. Project selection, estimating and bidding structure, the four independent pillars of estimating and the importance of job costing for accurate estimates will be covered. Both experienced estimators and new to the business estimators will walk away with tips, tools and a new understanding of being a thorough and confident estimator. Attendees will develop a process of knowing whether to bid a job, determining risks, identifying work scope, creating checklists to capture details and utilizing a take-off sheet to complete a detailed estimate.

- Identify the project selection process to determine if the project is right for your company
- Recognize the differences between estimating and bidding, and the skills required for both
- Outline the Four Pillars of Estimating
- Determine why job costing is critical to the estimate

**TUEBC Fee: \$325; \$375** after 12/11/19 and onsite

*4.0 continuing education hours approved for AIA/CES LU, PDH, MCAA and TCA.*

## LASER SCANNING WORKSHOP: Fundamentals of Utilizing Laser Scanners

**Course Code:** THLSW

**Date/Times:** Thurs, Feb 6, 8:00am - 12:00pm

**Instructors:** Rocky Geans, Tommy Ruttura

This workshop will dive into what laser scanning is, basics of operating laser scanners, scanning parameters, getting a point cloud, processing data and presenting client deliverables. We will also discuss laser scanning accuracy, errors and the use of laser scanning for ACI concrete tolerances.

- Identify fundamentals of laser scanning equipment
- Explain how to set up and operate laser scanner to get a point cloud
- Describe and analyze laser scanning data
- Outline the benefits and limitations of laser scanning

**THLSW Fee: \$325; \$375** after 12/11/19 and onsite

*4.0 continuing education hours approved for AIA/CES LU, PDH, MCAA and TCA.*