# EDUCATION COURSE CATALOG



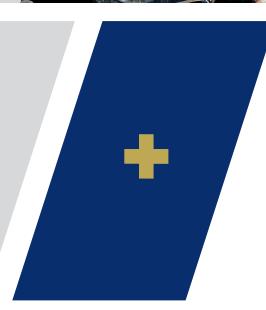
2025



# SCAN TO VISIT OUR WEBSITE



necasandiego.org/education





# **Additional Resources**

**NECA San Diego Education** 

**NECA San Diego On-Demand Education Library** 

**Electrical Training Institute San Diego - Continuing Education** 

**NECA National Education** 

**ETA Catalog** 

For more information on courses and upcoming events, please visit the Chapter's website at <a href="necessardiego.org/education">necessardiego.org/education</a>.

Please note that course topics, dates, and times are subject to change.

9350 Waxie Way, Suite 540 San Diego, CA 92123

P: 858-571-6322 necasandiego.org/education



#### **Bluebeam Tips & Tricks**

May 7, 2025 from 1:00pm - 3:00pm

Take your Revu Markup activities to the next level with Tips & Tricks on customizing standard Revu markups, sharing several ways you can change and organize markups in your project documents, and did you know that you can leave a reply on a Markup and even design your own custom line styles? Learn how to create and edit markups of various shapes, add control points and leaders, reorder and group markups, snapshot regular and non-rectangular markups, label them, create custom line styles, and apply markups to various pages.

New features to include: Multiply Markups, Customize Captions with Markup List Data, and Expanded Markups for Guest Collaborators.

**Continuing Education Hours:** 2 Hours

Format: Virtual

Instructor: April McCall; USCAD

#### Significant Changes to the NEC 2020 Code

May 14 & 15, 2025 from 8:00am - 12:00pm

Stay up to date with the latest updates to the National Electrical Code (NEC), the world's most recognized electrical code. This course provides a thorough review of the key changes in the 2020 NEC, including new articles and revised rules essential for contractors and installers. As technology advances, the NEC evolves to ensure compliance with modern electrical installations in both new and renovated buildings.

This interactive program equips electrical contractors and inspectors with the knowledge to meet the latest requirements, ensuring ongoing success in installations and compliance.

**Continuing Education Hours:** 8 Hours

Format: Virtual

Instructor: Michael Johnston; Roadrunner Technical Services LLC



#### Understanding Artificial Intelligence (AI) and Its Place In Your Business

May 28, 2025 from 10:00am - 12:00pm

As the construction industry embraces the digital revolution, Artificial Intelligence (AI) is revolutionizing how electrical contractors plan, execute, and optimize their work. From enhancing operational efficiency and improving job site safety to driving innovation in design and project management, AI offers powerful tools to meet the evolving demands of the electrical construction sector. This session will explore the transformative impact of AI, with a focus on practical applications that empower contractors to achieve greater accuracy, productivity, and cost-effectiveness.

#### **Key Takeaways:**

- Streamlining Operations: Learn how AI enhances efficiency across construction workflows, from planning and design to execution and maintenance.
- Improving Safety: Explore Al-driven safety solutions that mitigate risks and protect workers on job sites.
- Driving Innovation: Discover how advancements in AI are shaping the future of construction, enabling smarter decision-making and unlocking new opportunities.

**Continuing Education Hours:** 2 Hours

Format: Virtual

Instructor: Sumana Rao; Trimble

#### Managing the Lifeblood of Contracting - Cash Flow

June 17, 2025 from 8:00am - 11:00am

Cash flow is one of the most important issues facing contractors today. As the market continues to stay strong, companies are faced with starting new projects, hiring staff, and investing in assets to support the business. More companies go bankrupt due to cash flow issues than due to profitability. Many things can and should be done to improve cash management practices. We will explore a range of tools and techniques, from simple to complex, that allow firms to manage and control cash flow. Examples include contractual negotiation strategies, pricing and bidding practices, development of cost and resource-loaded schedules that tie to billing activities in the schedule of values, use of 12-week cash flow forecasts, project closeout procedures, and managing the billings and collection cycle. An interactive cash flow simulation provides hands-on experience that enhances the learning outcomes.

Following this course, participants will be able to:

- Discuss the importance of cash management practices
- Describe how to increase profits with billings and collections
- Identify tools and techniques that optimize cash flow
- Discuss how to maximize cash flow with process standardization
- Describe how to create transparency and accountability with measurement

**Continuing Education Hours:** 3 Hours

Format: Virtual

Instructor: Stephane McShane; Maxim Consulting Group



#### **Education Summit**

June 19, 2025 from 7:30am - 9:30am

NECA San Diego holds this annual meeting to gather valuable feedback from members regarding the chapter's educational programs. During this meeting, we provide updates on class surveys, instructor evaluations, and attendance data. Our goal is to continuously improve our educational offerings, and we want to hear directly from you—whether you are an attendee or a representative of a contractor company.

This is your opportunity to suggest new classes, hear what is planned for the remainder of the year, and ensure that your voice is heard in shaping the future of our education program.

**Continuing Education Hours:** N/A

Format: In-Person at ETI (4675 Viewridge Ave. San Diego, CA 92123)

**Instructor:** NECA Staff-Led Conversation

# Best Practices for Contract Administration and Documentation – The Devil Is In The Details

June 25, 2025 from 12:00pm - 3:00pm

This course emphasizes the importance of properly organized and detailed paperwork, often overlooked in construction projects. By focusing on both contract administration and proper documentation, participants will gain critical insights into key contract procedures and best practices for managing paperwork. This knowledge is essential for navigating the complexities of contract management and project documentation, ensuring successful project execution and compliance.

**Continuing Education Hours:** 3 Hours

Format: In-Person at ETI (4675 Viewridge Ave. San Diego, CA 92123)

**Instructor:** Pam Scholefield; Onsite Pro Development



#### **Basic Estimating of Electrical Construction**

July 14-16, 2025 from 7:30am - 3:30pm

Small mistakes in an estimate can have a huge impact on your bid's bottom line and this course provides the tools needed to be both comprehensive and competitive. This course will discuss the process for assembling an estimate including: developing material lists, applying labor unit data, material takeoff, and application of direct job costs, overhead, and profit.

Following this class, participants will be able to:

- List types of mistakes when estimating electrical construction projects and how to avoid them
- Describe the parts of an estimate
- Explain the importance of establishing the true cost of a project
- Develop an estimate to provide job management information

**Continuing Education Hours:** 24 Hours

Format: In-Person at ETI (4675 Viewridge Ave. San Diego, CA 92123)

**Instructor:** Matthew Firestone; Firestone Consulting Group

#### **Bluebeam Takeoffs and Estimations**

July 23 & 24, 2025 from 1:00pm - 4:00pm

Master Bluebeam Takeoffs and Estimations with this comprehensive course to boost your workflow efficiency and accuracy. Learn to use the Quantity Takeoff Profile in Revu, calibrate documents for precise measurements, and utilize advanced measurement tools. Discover how to track data in the Markups List, create custom columns for material and labor costs, and export data for analysis. Use visual search for counting and organize Summary Reports effectively. Apply industry-specific techniques to optimize your workflows and enhance project management.

**Continuing Education Hours:** 6 Hours

Format: Virtual

Instructor: April McCall; USCAD



#### **Advanced Estimating**

August 11 & 12, 2025 from 7:30am - 3:30pm

Building upon the principles taught in NECA's Basic Estimating course, this course focuses on the strategy and business decisions made during the estimating and bidding processes. The course will assist estimators and managers in thinking strategically about how they find, evaluate, and bid on electrical construction projects.

Following this course, participants will be able to:

- Explain the estimator's role and responsibilities throughout the bidding process
- Define estimating terminology
- Evaluate bidding opportunities for the most desirable projects
- Analyze factors that have effects on cost and labor productivity
- Evaluate the potential risk factors of a project
- Discuss the risks and responsibilities identified in the project specifications, labor agreements, scope letters, and standard contracts
- Describe the difference between overhead and profit and how they are applied to estimates.

**Continuing Education Hours:** 16 Hours

Format: In-Person at ETI (4675 Viewridge Ave. San Diego, CA 92123)

**Instructor:** Matthew Firestone; Firestone Consulting Group

#### **Change Orders & Claims**

August 20, 2025 from 8:00am - 12:00pm

This session leads participants through conventional change order and claims processes. Students will be encouraged to think through ways to manage their own change order systems better while considering common sense dispute resolution strategies. The workshop will focus on three important principles:

- Identifying, processing, and getting paid for change orders
- Avoiding disputes before they start
- Resolving disputes before they escalate

**Continuing Education Hours:** 4 Hours

Format: Virtual

Instructor: Paul Stout; Power Summit



#### **Enabling Success - Creating Alignment Between Field and Office**

August 26, 2025 from 8:00am - 11:00am

For construction firms to thrive, synergy, teamwork, and trust must exist between the office and the field. The proper deployment of defined processes and tools will facilitate this critical alignment. This collaboration must begin before mobilization and continue through project closeout. During this session, we will discuss the workflow that must exist in order to mitigate risk and maximize productivity. During this session, we will discuss why the processes of preconstruction planning, short interval planning, production tracking, daily project reports, exit strategy, and lessons learned are critical to the organization. We will also discuss what the benefits are for each member of the team, and how these processes can be properly implemented. Learning Objectives:

- Describe the information needed to effectively navigate preconstruction planning
- Learn the critical communication required in short-interval planning
- Discuss the importance of accurate production tracking
- Identify the needed data transfer of a daily project report
- Outline the data collection required of the project team during closeout and lessons learned

**Continuing Education Hours:** 3 Hours

**Format:** Virtual

**Instructor:** Stephane McShane; Maxim Consulting Group

#### NFPA 70E Essentials - Electrical Safety in the Workplace

September 3 & 4, 2025 from 8:00am - 12:00pm

This course covers electrical safety in the workplace as outlined in the 2024 NFPA 70E Standard. It emphasizes the shared responsibility of employers and employees for compliance, focusing on recent revisions that prioritize hazard elimination. Topics include the hierarchy of risk controls, risk assessments, human performance factors, and determining when energized work is justified. The course also covers lockout/tagout procedures, Arc Flash PPE selection, and required training and documentation. Attendees will gain essential knowledge and confidence in applying NFPA 70E standards to ensure workplace safety.

**Continuing Education Hours:** 8 Hours

Format: Virtual

Instructor: Michael Johnston; Roadrunner Technical Services LLC



#### An Advanced Primer to Power Systems Study

September 18, 2025 from 12:00pm - 3:00pm

This class presents a general overview of the major components of a Power System Study:

- Short Circuit Analysis
- Selective Coordination
- Arc Flash Analysis

We will explore how they each contribute to a reliable electrical distribution system, the importance of each, and the safety aspects of each, and we will also take a deeper look into the Selective Coordination of OCPDs and how that relates to turning those circuit breaker dials in the field!

Following this course, participants will learn:

- Your part in the engineer performing a study
- How equipment selection takes place
- What to look for in a finished study
- How to read a TCC
- Implementing breaker settings
- Arc Flash Labels and PPE

**Continuing Education Hours:** 3 Hours

Format: In-Person at ETI (4675 Viewridge Ave. San Diego, CA 92123)

**Instructor:** Michael Rizza; Rizza Engineering

#### **Construction Correspondence and Effective Business Writing**

September 25, 2025 from 8:00am - 12:00pm

This workshop covers essential construction correspondence, from grammar basics to industry-specific requirements. Through fast-paced exercises, participants will improve writing and comprehension while learning the purpose and structure of key documents like Notices of Delay, RFIs, Substantial Completion, and more. Topics include meeting agendas, responses, and work directives, with a focus on proper style, format, and documentation practices throughout.

**Continuing Education Hours:** 4 Hours

Format: Virtual

**Instructor:** Paul Stout; Power Summit



#### 2023 NEC Changes that Impact Electrical Contractors

October 30, 2025 from 7:30am - 3:30pm

The National Electrical Code is the most widely recognized electrical code in the world. Every three years it is updated to reflect the newest installation practices used by the electrical industry.

This course provides an authoritative, thorough review of the most significant changes in the 2023 NEC, including new articles and revisions that contractors and installers alike must understand and apply in their daily operations. Electrical installations, both in new construction and renovations are subject to compliance with NEC requirements. As jurisdictions adopt and enforce each new edition of the NEC, it is very important that electrical contractors, electrical workers, and electrical inspectors are in tune with the latest minimum requirements. This high-energy, interactive program provides electrical contractors and inspectors with information that helps them with continued success in installation and compliance.

**Continuing Education Hours:** 8 Hours

**Format:** In-Person at ETI (4675 Viewridge Ave. San Diego, CA 92123) **Instructor:** Michael Johnston; Roadrunner Technical Services LLC