Catalog of Courses

For NECA Chapters

As of January 2026

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Business Management

Advanced Accounting & Strategies for Construction Managers

Focusing on establishing familiarity and understanding of advanced managerial accounting terms and strategies. The primary audience for this course is the mid-career or advancing construction manager and the small business owner. It also serves as a contextual review for the seasoned CMs and early career finance managers. It begins with a review of the unique structure of a construction industry financial statement and the 'why'. The training quickly leads into analysis of financial statements, e.g. break-even volume, financial ratios, key performance indicators, etc. This is critical to CM's and CFM's because we are continually being monitored for our financial health (character, capacity, capital). The course introduces the concepts of equity vs. debt financing and how to determine which to use. We also consider how to leverage trade discounts to accelerate early payment terms and the costs/benefits of this strategy. Most importantly, this course will help CMs understand how profits are determined and the many pitfalls in construction management that erode profits.

Following this course, participants will be able to:

- Analyze construction Financial Statements
- Interpert key financial ratios and KPI's
- Evaluate equity vs. debt financing options
- Identify prfit drivers and common cost pitfalls

Target audience: Mid career and rising construction managers, Small business owners, Early Career Financial Mangaers
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: John Killingsworth

Banking and Surety Matters Today

Focusing on how to make your businesses financial statements look best to third parties, this course will discuss the relationships between financial statements, bank financing and bonding. Key ratios, how to review loan documents, and negative and affirmative covenants will also be discussed.

Following this course, participants will be able to:

- Identify the relationships between financial statements and bonding
- Describe key ratios
- Discuss how to review loan documents
- Explain how to improve financial statements

Target audience: Company Owners, Bookkeepers, Controllers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Business Ethics

The purpose of this program is to discuss business ethics and corporate social responsibility within the Electrical Contractors industry. In depth discussion on proper business policies and practices, such as codes and standards, performance liability, safety liability and other critical issues.

Following this course, participants will be able to:

- Identify examples of poor and good ethics in the workplace and how it can affect your business
- Explain what is Business Ethics and why it is important in your business
- Apply the foundation and transparency of Business Ethics in your company
- Discuss the difference between a Code of Ethics and a Code of Conduct

Target audience: Individuals at all levels in electrical contracting firms
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Business Financial Planning

Many business owners spend too much time working in their business and not working on their business and their personal planning. When this happens, owners may not be prepared for retirement beyond the idea selling the business. Owners need to go beyond just utilizing the value of their business and value of their personal real estate as their primary personal financial planning.

Following this course, participants will be able to:

- Discuss how to create a strong business through financial planning
- Describe how business planning can help personal financial planning
- Explain how to create a personal financial plan
- Identify challenges related to financial planning
- Explain internal and external financial reporting procedures
- Recognize the value of creating a strong business financial plan

Target audience: Company owners
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Career Path Mapping

Organizations are justifiably concerned about the ability to retain talent in an environment where availability of workers is so very scarce. Additionally, the changing needs of today's workforce require employers to reassess their employee development programs. Career path mapping brings clarity to an otherwise cloaked path of progression, allowing the employee to understand the opportunities within the firm and engage them in creating, and owning, their own map.

Following this course, participants will be able to:

- Understand the driving force behind the need for career path mapping
- Develop a strategy for creating an effective career path map that focuses and engages today's construction staff
- Discuss the deployment and implementation needed to create a positive, building culture

Target audience: HR, Executives and Leadership
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

CPA as Trusted Business Advisor: Getting the Most Out of the Relationship

Is your CPA a trusted business advisor who helps to navigate your business? This course presents a qualitative evaluation process for selecting advisors, including methods to evaluate their performance to develop strong, long-lasting relationships. The course also provides an in-depth analysis of choice of entity and the advantages and disadvantages of each. Different revenue recognition policies will be discussed.

Following this course, participants will be able to:

- Discuss how to select financial advisors
- Describe how to evaluate performance
- Explain the benefits of strong, proactive, long-lasting relationship
- Discuss the benefits of accounting systems, financial reports, and personal and estate planning

Target audience: business owners, executive level management, CFOs, controllers, and bookkeepers
Duration: Half-day
CE Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Effective Time Management

If you are looking for tips, tools, and techniques to improve your overall productivity, this is a training session worth your time! In this class, you will learn how to identify and eliminate common time management obstacles, complete common tasks more efficiently, and identify habits you could change to give you more time in your day, week, and life!

If you have trouble staying mentally on task, keep a list of to-dos in your head, and feel overwhelmed at
times, it does not have to be that way. Learn how to develop a time budget, organize your inbox, manage meetings, complete common tasks faster, and ultimately get the most accomplished each day.

Students will also learn how to use AI to expedite the completion of simple or complex tasks!

Following this course, participants will be able to:

- Learn principles of time management
- Create a focused schedule and workspace
- Identify ineffective ways to work
- Reduce interruptions
- Deal with feeling overwhelmed
- Organize your inbox
- Respond to quick questions
- Make the most of meetings

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: David Ashcraft; Advantage Learning Systems
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Financial Planning for Blended Families

There are many questions that arise related to finances in blended families. Be prepared for tough conversations and learn how to navigate the path to combining not only your two households, but income, personal assets, and business assets as well. You will be guided through issues that should be considered, along with solutions to protect not only you, but your new spouse and children and your business.

Following this course, participants will be able to:

- Discuss the questions that arise when blending families, along with alternative solutions to determine what is best for you
- Explain why a prenuptial agreement is always needed
- Consider the issues that arise in financially providing for children that are part of the blended family, including estate planning
- Identify areas in your business that should be addressed when in a blended family situation

Target audience: business owners, executive level management
Duration: Half-day
CE Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Fraud

Fraud comes in many different forms in the construction industry. Many think of fraud as stealing money but often theft is happening through wasted time, tool theft and many other preventable items at the job site. In depth discussion on what steps the owner can take to help prevent and/or detect fraud within their organization.

Following this course, participants will be able to:

- Identify how fraud may be, or likely is, being committed in your business
- Explain how management can be involved in preventing fraud within your company
- Apply various internal controls to help minimize, or even eliminate, fraud
- Discuss next steps within your company to implement fraud protections

Target audience: Individuals at all levels in electrical contracting firms
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Hiring Talent

Making an incorrect hire in today's market has a much higher cost than ever before. It is imperative that organizations make wise hiring decisions. It is important to know what prohibitive behaviors to avoid, as well as having an established process to aid those who may not conduct interviews often to excel in this endeavor.

Following this course, participants will be able to:

- Understand how proper definitions of roles and responsibilities is necessary prior to hiring
- Discuss how to classify and test for the capabilities needed for a given position
- Define interview questions that test for both capability and thought process
- Show examples of prohibited behaviors and discuss why they are so critical to identify

Target audience: HR, Executives and Leadership
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Increasing Engagement, Retention, and Development for Employees

The workforce shortage is affecting both the revenue, and the margin, for the majority of contractors. The ability to hire, retain, engage, train, and develop employees increases the chances for them, and for the organization, to succeed. To accomplish this, specific processes and development paths must be created, implemented, and measured.

Following this course, participants will be able to:

- Discuss the need for roles and responsibilities definition
- Show the use of the role definition and time span needed to increase the percentage of "good" hires
- Describe the employee collaboration using skill set matrix information
- Outline the career path mapping process to create long term improvement and engagement
- Discuss the link between performance management and incentive compensation

Duration: Half-day
CE Hours: 3 Hours
Instructor: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Inequitable Payment Practices

Specialty contractors are expected to manage many forms of risk; some of which is inherent to the trade. Other forms of risk, such as payment practices that result in carrying the cost of capital for 30-60-90 days, have a significant impact on your ability to remain financially solid and/or acquire new work. This presentation quantifies the impact of slow payment and identifies mitigation strategies to address inequitable payment practices and protect the interests of specialty contractors.

This program is based on the research report *Addressing Inequitable Payment Practices* funded by ELECTRI International.

Following this course, participants will be able to:

- Explain quantification of the impact of inequitable payment practices
- List specific, tangible things specialty contractors can do to improve payment cycles
- Discuss the theory of surrounding contract language and enforceability
- Negotiate points with general contractors and owners
- Identify legislative talking points

Target audience: Sr Execs, Financial Managers and Project Managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructors Available; Maxim Consulting Group
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details

Key Financial Ratios and Benchmarking

This course is a deep dive into calculating and using financial ratios to effectively manage your business. Different stakeholders rely on key ratios to make decisions about your company such as whether to approve a loan or how much bonding capacity to allow. This course will help you understand what ratios these stakeholders use and how to calculate them. Benchmarking will be discussed as well as how to identify potential problems based upon calculated ratios.

Following this course, participants will be able to:

- Explain what financial ratios are and why they are important in managing your business
- Calculate key liquidity , profitability, leverage and activity ratios
- Use financial ratios to make better business decisions
- Prepare a dashboard of Key Performance Indicators (KPIs)

Target audience: business owners, executive level management, CFOs, controllers, and bookkeepers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Key Performance Indicators: Using Lagging Information to Create Leading Indicators

Effective financial management expertise at the top of your operation is expected. Learn how to identify the key indicators that monitor project performance and allow you to drive responsibility down to the project level, affecting the greatest positive change. Discover how to automate processes throughout different levels of your organization so that the correct information is reaching the right staff levels in a timely manner. Using lagging information to create leading indicators is an age-old problem but with a bit of insight, we can identify the top 12 indicators all organizations should be measuring and reporting on.

Following this course, participants will be able to:

- Describe key performance metrics that create actionable information
- Discuss data collection and metric automation methods
- Explain deployment options

Target audience: Senior executives, financial managers and project managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Labor Training and the Impact on Your Member Business

Although the construction industry is booming, tradespeople are becoming extremely difficult to locate, making it difficult to complete projects on time and within budget. The lack of interest in young people entering the trades is an alarming situation. Local associations can play a key role in communicating the benefits of joining the trades. This course will provide ideas on how you can help the industry and your member businesses by promoting and encouraging careers in the trades.

Following this course, participants will be able to:

- Identify the contributing factors in the labor shortage
- Explain ways the local associations can increase interest in the trades
- Apply techniques in your local area to recruit candidates for the trades

Target audience: business owners, executive level management
Duration: Half-day
CE Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Look In The Mirror: An Executive's Role in Business Development

There is no person better at selling your company than the owners, president and executive team members. The first step to effective business development is freeing up the executive team so that they can sell the work and close the sale. Critical to making this happen is strong organizational structure and process, and consistent execution of well-defined processes. Once this structure is in place, you have the time to evaluate your company's potential for success, develop the strategy and ultimately align the marketing and branding to match the strategy so that the company, over time, can move to a dedicated sales force model. Sending the business development team off on a mission to "get work" is a recipe for failure. Learn how to put structure behind the business development process that will generate results.

Following this course, participants will be able to:

- Discuss the organizational structure and processes your company needs in place in order to make time for you to focus on building the business
- Explain how to develop a strategy for selling work that capitalizes on the markets where you have the highest potential for profitability
- Identify the role that everyone in the organization has in marketing and business development
- Discuss best practices of other contractor's experience to see how critical the executive's role is to company growth

Target audience: Senior executives, financial managers and project managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Managing Construction Delay Claims

Construction delay claims can impact any electrical construction project, and the nature of our industry is conducive to them because delays caused by other contractors are commonly passed on to the electrical contractors. This course will discuss how to minimize delay claims and prepare and present your side in a clear and persuasive manner.

Following this course, participants will be able to:

- Describe the basics of claims and delay claim management
- Identify best practices to use in the workforce to avoid delay claims
- Demonstrate how to prepare, analyze, and present claims
- Recognize causes of delay claims

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Managing the Lifeblood of Contracting - Cash Flow

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

Target audience: Senior executives, financial managers and project managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Maxim Consulting Group; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Managing Work in Progress

Many project managers lack a clear handle on how their projects are performing financially. Most commonly it is because they have not been trained on how to forecast properly. We find many contractors struggle with how to build a robust cost projection process that provides for consistency and predictability. Profit fade at 90% complete is no longer an option in today's market. Teach project manager how to properly set up job budgets, track progress and forecast accurately. Moreover, learn critical financial indicators that point to problems on projects early so they can be rectified.

Following this course, participants will be able to:

- Identify how to manage work-in-process for better profitability
- Explain the relationship between project profitability and processes (budgeting, forecasting, change control, job status reporting and WIP)
- Describe how to apply earned value reporting to projects
- Learn key performance indicators that point to critical project performance problems

Target audience: Senior executives, financial managers and project managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Ownership Transition Management Succession

Nearly half of all contractors will go through an ownership transition and / or management succession by 2025. Learn what alternatives exist to transfer ownership along with the pros and cons of each. Also explore techniques to garner alignment and buy in from the incoming management team. Evaluate tools to identify skills gaps of the new ownership and management team and discuss resources and options for filling the gaps.

Following this course, participants will be able to:

- Understand alternative methods and options for ownership transition
- Learn how to identify an incoming management team
- Identify options to structure incoming ownership / management team to optimize results
- Identify resources and options to help fill skills gaps considered necessary for success

Target audience: Sr Execs, Financial Managers and Project Managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Michael McLin, Stephane McShane, Stephen Bonebrake or Dan Doyon
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Project Level Cash Flow Management

As a construction manager gains more and more responsibilities, they find that they are managing incredible amounts of revenue and risk. Poor cash flow is the number one reason for company failures, which emphasizes the importance of understanding the principles taught in this course. This in-person training will help learners understand the construction payment cycle, the critical value of timely and consistent invoicing, and the impacts of delayed invoicing and receivables. It will help construction managers navigate the contractual relationships with owners/owner's representatives, and how to use a Work-In-Progress (WIP) report. The application of these principles will certainly lead to improved cash flow and profitability.

Following this course, participants will be able to:

- Understand the construction payment cycle and it's impact on cash flow
- Implement timely invoicing practices to prevent cash flow delays
- Manage owner and contract payment relationship effectively
- Use Work in Progress reports to track project cash flow and performance

Target audience: Project managers, Project engineers, and Superintendents.
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: John Killingsworth

Succession Planning : Who will be Next in Your Seat?

The purpose of this program is to discuss with the participants the different ways to transfer ownership from the founders to children, key employees, or independent third parties. We discuss various methods, planning strategies, document drafting, valuation matters, and other major concerns to the process.

Following this course, participants will be able to:

- Identify how to determine who your successors will be
- Explain what is necessary for succession to be successful for your business
- Apply various methods to see what fits for your company
- Discuss why every company needs a solid succession plan

Target audience: Individuals at all levels in electrical contracting firms
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Supply Chain Management

Nearly 40% of every dollar that runs through and organization is materials. However, the industry pays little attention to supply chain because the risk is in the labor, not the materials. This session will explore how to better leverage your supply chain to not only drive down material prices and costs associated with the "ing's" of finding, buying, invoicing, payment, shipping, handling, etc. but also how to drive improvements in labor productivity through more effective use of your supply chain. Participants will explore basic supply chain principles, purchasing contracts, vendor managed inventory, consignment and full blow supply chain mechanics and the use of material requirements planning software and systems.

Following this course, participants will be able to:

- Understand the economics of materials and their impact on productivity and profitability
- Understand supply chain terminology and key concepts
- Evaluate options to improving your own supply chain
- Understand the impact of material requirements planning system

Target audience: Sr Execs, Financial Managers and Project Managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructors Available; Maxim Consulting Group
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Tax Overview

The ever changing and complex tax rules can leave you overwhelmed and confused. This course provides a general overview of recent tax changes. It includes a discussion on the qualified business income deduction, depreciation, tax method of accounting, and employee retention credits. The content is updated as changes in the tax code occur.

Following this course, participants will be able to:

- Discuss current tax proposals and their status
- Explain the qualified business income deduction and its restrictions and limitations
- Explain different tax methods of accounting
- Understand the employee retention credit (ERC) rules and determine if your company is eligible

Target audience: business owners, executive level management, CFOs, controllers, and bookkeepers
Duration: Half-day
CE Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Top 10 Business Practices that Can Change Your Company

Learn 10 Business Practices that you can implement now to help achieve your goals. Topics discussed will include: selecting advisors, internal controls, business plans, benchmarking, succession planning, as well as others.

Following this course, participants will be able to:

- Understand why selecting the best business advisors is important
- Understand internal controls and how to manage them
- Discuss key financial information and how it can be used to make decisions
- Explain factors to consider in succession planning

Target audience: business owners and executive level management
Duration: Half-day
CE Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Transform Your Organization for The Future

With the future bringing more of the same accelerated challenges of schedule compression, pricing pressure, and manpower shortages, the industry will be forced to innovate at a heightened clip. Most contractors are trying to solve these massive industry issues with tactical solutions and everyone is basically trying the same approach they have used for years.

The reality is a new business model that is evolving to address these challenges with strategic, long-term solutions. Best in class electrical contractors are utilizing value stream mapping to visualize work systems (prefabrication, IT, financial systems, etc.) and identify the gaps, overlaps and roadblocks in how customer requests/orders are completed. We will use case studies of US based contractors including pictures and detailed descriptions of what they have done, why, and the substantial bottom line results they are enjoying.

Following this course, participants will be able to:

- Learn to identify internal and external customers
- Define what your customers value
- Understand the fundamentals to developing a value stream map
- Identify how a gap analysis is used to highlight process improvements

Target audience: Sr Execs, Financial Managers and Project Managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructors Available; Maxim Consulting Group
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Understanding Construction Accounting

An understanding of construction accounting is essential for the success of your business. This course covers topics such as revenue recognition methods, the components of contract costs, how to calculate revenue earned, balance sheet accounts that are unique to contractors and key financial ratios for contractors.

Following this course, participants will be able to:

- Calculate job costs
- List components of contract costs
- Give examples of methods to measure percentage of completion and revenue earned
- Explain how to calculate financial ratios

Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Using NECA's Claim Management Resources*

NECA has published a variety of resources to help an electrical contractor develop and document a claim. This course will use these documents to provide participants the tools needed to build a strong case in a claims situation.

Following this course, participants will be able to:

- Recognize the common causes of lost productivity
- Know the methods of estimating lost productivity
- Select and prepare appropriate methods of claim settlement tactics
- Evaluate and select a method of overhead recovery

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Mark Federle, Marquette University

Work in Process: Are You Tracking this Critical Metric?
The building and remodeling industries continue to boom, which leads to greater competition. With more competition comes tighter gross margins. To maintain a healthy bottom line and continue to win business, it is essential that you have a solid understanding of the work-in-process schedule. Not tracking and understanding this metric can result in misleading financial performance and poor decision making. This session will help you identify the key components of your work in process schedule, calculate revenue and margins properly and ensure you have the most accurate data for your business.

Following this course, participants will be able to:

- Identify the key components of a work in process schedule
- Understand the difference between margin and markup
- Calculate the over and under billings of a contract in process
- Understand how to analyze contracts for profit fade or gain

Target audience: business owners, executive level management, project managers, job superintendents, CFOs, controllers, and bookkeepers
Duration: Half-day
CE Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training.

Your Business, Your People, Your End
This course discusses key components of your business including financial information, projections and goals and benchmarking. It also explains why your people are the key to your success and how to invest in them. Succession and retirement planning will also be highlighted.

Following this course, participants will be able to:

- Describe the financial accounts and metrics unique to contractors
- Develop Key Performance Indicators (KPIs) for your company
- Explain how to attract and retain talent
- Understand key considerations in developing a succession plan for your business

Target audience: business owners and executive level management
Duration: Half-day
CE Hours: 3 Hours
Instructors: Dave O'Brien; Mosley, Pfundt & Glick Inc
Note: Combine two Mosley, Pfundt & Glick Inc programs to offer a full day of training

Estimating

Advanced Estimating Stategies

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 think strategically in how they find, evaluate, and bid 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 most desirable projects
- Analyze factors 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.
- Target audience: Individuals with a firm grasp of basic estimating principles and experience preparing bids

Target audience: Individuals with a firm grasp of basic estimating principles and experience preparing bids.
Prerequisite: Basic Estimating of Electrical Construction or similar industry expereiency
Duration: Two days
Continuing Education Hours: 12 Hours
Note: Special pricing applies for some instructors due to instructor fees. Contact the NECA Education team for details.

Basic Estimating of Electrical Construction

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 course, participants will be able to:

- List types of mistakes found when estimating electrical construction projects and how to avoid them
- Describe the parts of an estimate
- Explain the importance of establishing the true cost for a project
- Develop an estimate to provide job management information
- Discuss how labor units can be used to competitively bid projects
- Explain the difference between a competitive bid and simply a low bid

Target audience: Individuals who are new to estimating or are looking to hone their skills
Prerequisite: An understanding of electrical construction and the application of electrical material and completion of NECA's Introduction to the Manual of Labor Units online course (included with registration.)
Duration: three-days
Continuing Education Hours: 18 Hours
Note: Special pricing applies for some instructors due to instructor fees. Contact the NECA Education team for detail.

Calculating Shop Burden

Electrical contractors are unique in the construction industry in that they engineer, install and integrate products made from both commodities and engineered materials. The scope of services provided by electrical contractors creates confusion and sometimes conflict with owners and general contractors who may not be familiar with the cost structure of an electrical contractor. The purpose of this presentation is to detail the various types of expenses incurred by an electrical contractor in support of a proper determination of overhead and burden rates. The objective is to provide a clear and concise discussion surrounding the scope of services provided by the electrical contractor and thus how overhead and burden should be calculated.

Following this course, participants will be able to:

- Understand the impact of fixed and variable costs on burdens
- Differentiate between overhead burden, engineering/fabrication burdens, and field burdens
- Calculate overhead, engineering/fabrication, and field burdens separately

Target audience: PM, Chief Estimators, CFO's and Accounting
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Labor Relations

Basic Labor Relations

Developed to strengthen understanding of labor relations roles and regulations, this course reviews the laws that framed the modern labor movement and established how unions and union-signatory contractors interact. Discussions will include the NECA-IBEW relationship, multiemployer bargaining, and the role and authority of the chapter in negotiations. Participants will learn the history behind Category I and II and other standard language, as well as how that language impacts local negotiations. Attendees will come away with a better understanding of the legal and procedural framework surrounding the NECA-IBEW relationship.

Following this course, participants will be able to:

- Identify laws that framed the modern labor movement
- Describe how unions and union-signatory contractors interact
- Discuss the NECA-IBEW relationship, multiemployer bargaining, and role of the chapter in negotiations.
- Explain how language impacts local negotiations

Duration: 1.5 or 2.5 hours
Instructor: NECA Regional Field Representatives

CIR: Preparation and Presentation

When negotiations or grievance proceedings are not settled locally, the chapter often finds itself "heading to Council." This seminar briefly traces the background and purpose of the Council on Industrial Relations (CIR) and discusses proper procedures when submitting a case. Participants will analyze a video reenactment of an actual grievance case, identifying strengths and weaknesses in a chapter's presentation to the CIR and discussing the "do's and don'ts" of presenting a case.

Following this course, participants will be able to:

- Define the purpose of the Council of Industrial Relations (CIR)
- Explain the procedures for submitting a case to the Council
- Discuss the "do's and don'ts" of presenting a case to the Council

Target audience: NECA Chapter Managers
Duration: 4 hours
Instructor: NECA Regional Field Representatives

Grievance Handling

Grievances are an unfortunate reality in the unionized construction industry however, if properly handled, they needn't grow into major disruptions. The grievance process in NECA-IBEW agreements allows resolution of workplace disagreements in a more timely and equitable fashion than when employees resort to governmental agencies or the courts for satisfaction. When grievances are settled quickly and in a just manner, the relationship between the contractors and the union often improves as well.

Following this course, participants will be able to:

- Identify ten steps that will make an labor-management committee hearing effective
- Recognize grievance procedures to assure fairness
- Analyze how grievance settlements are handled
- Discuss the pros and cons of the grievance process

Duration: 2 hours
Instructor: NECA Regional Field Representatives

Negotiations

Collective bargaining is a process, the goal of which is to arrive at an agreement on wages, hours, and conditions for a fixed period of time. This seminar examines the principles, types and stages of bargaining; including research, investigation, planning, preparation, negotiation and conclusion. Participants will discuss the proposal process, benefits and drawbacks of interest-based and positional bargaining methods and the importance of ground rules.

Following this course, participants will be able to:

- Discuss how to develop, defend, and sell proposals in negotiations
- Describe the benefits and drawbacks of interest-based and positional bargaining methods
- Recognize the importance of establishing and maintaining bargaining ground rules
- Explain methods to keep negotiations on track to a successful conclusion.

Duration: Full-day
Instructor: NECA Regional Field Representatives

Selecting Your Negotiating Team

Successful negotiations often begin even before the first exchange of proposals, with the selection of the chapter's negotiating team. To be effective, the committee must work as a team with a clearly understood goal, plan and rules of conduct. This course will help the chapter establish objective criteria for the selection of its negotiating committee. Discussions will include procedures for committee selection, strategies of effective teams, proposal sharing and goal planning.

Following this course, participants will be able to:

- Identify strategies to improve team effectiveness
- Explain procedures of selecting a negotiating committee
- Present potential proposals to the negotiating team
- Outline a plan to achieve goals successfully

Duration: 1.5 hours
Instructor: NECA Regional Field Representatives

Leadership and Communications

A Leaders Guide to Building Better Relationships

There is almost always some level of division between the field and the office, but there doesn't have tobe. When we can work together as a team, great things can happen. In this program, Nic will walk yourproject managers through some simple steps and ideas that will improve communication and relationships with their field leaders. It's natural to try to go our separate ways on and off the job, but when we can all begin to pull on the same end of the rope performance and productivity increase.

Following this course, participants will be able to:

- Identify the common pitfalls of miscommunication and complacency in our organizations.
- Work better together as a single team and the cost if we do not.
- Identify common pitfalls and communication issues with those we lead on and off the job.
- Deliver tough news and criticism that doesn't divide us.
- Successfully navigate conflict with anyone.
- Receive tips, tricks, tactics, and techniques any great leader must master to become a better leader.

Continuing Education Hours: 6 Hours
Instructor: Nic Bittle; Workforce Pro
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Effective Client Communication

Multiple factors influence effective client communications including self-awareness, self-improvement, social awareness and relationship management. In this session, you will learn how to attract, build and maintain long lasting client relations. Better communication skills lead to more client trust, faster decisions and more referrals. This class will benefit those with 1 or 20 plus years of experience.

Following this course, participants will be able to:

- Explain how to build stronger rapport and trust (and maintain it)
- Discuss ideas to connect with clients faster
- Ask better questions to uncover client priorities (Hot Buttons) and their pet peeves.
- Identify techniques that improve listening skills (You can't ask great questions if you aren't listening)
- Identify distracting appearance and auditory behaviors and how to reduce them
- List tips to illustrate ideas and improve collaborative communication
- Analyze characteristics of a poor listener
- Explain how to interpret nonverbal responses

Audience: Individuals at all levels in electrical contracting firms
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: David Ashcraft; Advantage Learning Systems
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

How to Nail Project Interviews

With all the effort it takes to get an appointment with a new prospect, don't miss the opportunity to win business because of a bad presentation. This program will discuss presentation preparation, awareness, techniques and leadership and provide strategies to influence any audience. Distracting appearance and auditory behaviors and how to reduce them will also be examined. Whether you present individually, or as part of a team, you will take away specific tactics proven to get your presentation off the ground and to land it effectively.

Following this course, participants will be able to:

- Discuss tips to prepare for a presentation
- Identify techniques to connect with an audience
- Explain how to tell a better story
- List various types of visuals

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: David Ashcraft; Advantage Learning Systems
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Inspiring Trust

Several recent workforce studies have shown that the number one cited characteristic of an effective leader is trust. Great leaders don't dictate, they influence. And influence comes from your ability to engender credibility and inspire people to believe you...and believe in you. When your team members trust you as a leader, they will readily volunteer their best efforts.

Following this course, participants will be able to:

- Understand how trust will help you produce better results—faster.
- Adopt the specific behaviors that build and maintain trust.
- Identify the "taxes" low trust exacts on the ability of your team to achieve your team's purposes.
- Increase attention on critical objectives instead of politics and hidden

Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: J. Scott Hopkins
Note: Special pricing applies due to the materials provided. Contact the NECA Education team for details

Leadership for the Field and Office

This course will help the participants develop the skills and understanding they need to lead others. The will learn to persuade others, negotiate and problem solve and develop collaboration among team members.

Following this course, participants will be able to:

- Explain how to effectively deal with different people (and different behavior styles)
- Apply Situational Leadership in coaching situations
- Build consensus, cohesion, buy-in, and team commitment
- Diagnose the focus and source of conflicts
- Utilize appropriate conflict management strategies
- Resolve interpersonal confrontations through collaborations

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Mark Federle, Marquette University

Mentorship, Quit Talking About It and Do It

Mentorship is one of those buzz words that gets thrown around a lot in our industry. The fact is we need mentors. We need mentors because our industry has an unimaginable amount of wisdom, knowledge and insights locked away inside the minds of our best and brightest. What is worse is many of those individuals will be leaving our industry in the next 14 years, but will this valuable information be leaving with them? The choice is yours. Many companies have rolled out a "mentorship program" only to see them fade and fizzle without any results. It doesn't have to be this way. With a little structure, you can build a program for your organization that will give you the results you want and need.

Following this course, participants will be able to:

- Identify why some programs work and others do not
- Build a successful mentorship program for your organization that will stick
- Identify the pitfalls that can sabotage your success
- Leave with a road map you can take back to your company and immediately implement

Target audience: Owners, Executives, Decision Makers, Key Leadership
Duration: Full-day
CE Hours: 6 Hours
Instructor: Nic Bittle; Workforce Pro
Note: Special pricing applies due to the materials provided. Contact the NECA Education team for details

Transformational Leadership: Creating High Performance Work Teams

Companies invest millions of dollars in technology, equipment and technical training for improved performance and productivity, with little to no investment in the human interaction side of leadership. Well-intentioned managers, supervisors and foremen create barriers to success, never realizing the negative impact they may have on subordinates, bosses or peers. This program is designed to identify and eliminate potential blind spots to those behaviors which could be sabotaging performance and create dysfunctional cultures impacting safety, quality and productivity.

Following this course, participants will be able to:

- Discuss self-awareness and emotional intelligence skills that lead to transformational leadership and positive culture change
- Explain how to establish a culture of trust and open communications at all levels of the organization
- Describe improved leadership skills that lead to employee engagement and high performance work team

Target audience: Managers, supervisors and foremen
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Bruce Bolger; Bruce Bolger Company

Revealing the Leader Within:The Bad Habbits and Worst Practices Great leaders Stop Doing in Order to Increase their Influence

The last thing any leader wants or needs is another list of qualities or behaviors they must adopt to become a better leader. Instead of piling on ideas and best practices that tend to overwhelm and confuse, what if I told you we all have a great leader hidden inside us. We don't need to add more behaviors, and habits, but instead take them away. Just like a master sculptor chips away at the unwanted material to reveal their masterpiece many of the great leaders in our industry have simply eliminated their bad habits and behaviors to become a better leader themselves. Being a great leader is more about simplifying how you lead, not complicating it.
In this workshop we will identify the behaviors and bad habits many leaders can easily eliminate to have a greater degree of influence with those they serve.
In this program you will learn:

• The most common bad habits and worst practices of many leaders.
• How to replace those bad habits with best practices proven to increase your influence.
• How to better communicate with those on and off your team.
• The tips, tricks, tactics, and techniques any great leader must master to become a better leader.

Target audience: Field Foremen, General Foremen and Future Leaders
Duration: Full-day
CE Hours: 6 Hours
Instructor: Nic Bittle; Workforce Pro
Note: Special pricing applies due to the materials provided. Contact the NECA Education team for details

Project Management

Change Order Management

Effective change order management can dramatically reduce a subcontractor's risk and increase profitability. This interactive course explores the change order process from a subcontractor's view point and provides participants with hands on training in recognizing, scoping, pricing, and negotiating change orders. This course culminates in a mock negotiation where participants can immediately practice the skills that they have learned.

Following this class, participants will be able to:

- Identify how to properly notify owners and general contractors of changed conditions to reserve your rights
- Discuss how to scope, price and sell a change order
- Explain how to negotiate using strategies to maximize outcomes

Target audience: HR, Executives and Leadership
Duration: Half-day
CE Hours: 3 Hours
Instructor: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Change Order Management in Electrical Construction

Most electrical contractors agree that one of the industry's most vexing problems is the change order. They may significantly alter the nature of the work, change the materials to be installed, or be considered "insignificant" changes, but they often alter the sequence of scheduled activities, require rework of installations and divert some manpower and equipment needed for the original contract work.

Following this course, participants will be able to:

- Identify change order errors in advance to minimize project loss
- Describe the impact of change management on project success
- Discuss how to minimize the impact of change orders
- Explain how to manage changes on a project

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Crew Level Production Planning and Execution: Set Goals and Win

Case studies dispel common myths and pitfalls of typical field productivity approaches. Case studies illustrate effective Crew Level Production Planning techniques, including: visual batching of work, input worksheets, resource (manpower) loaded scheduling, and labor cost analysis, simple daily productivity tracking and forecasting, and effective, measurable improvement strategies.

Following this course, participants will be able to:

- Define and measure productivity
- Discuss case studies and real examples of planning tools designed to set targets and manage labor productivity for superior results

Target audience: Executive, Project Management, Field Leadership
Duration: Full -day
Continuing Education Hours: 6 Hours
Instructors: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Creating a Change Order Process

The creation and use of standardized contracts and change order processes is essential for construction projects. This session will provide the tools you need to support your change order requests and promote a standardized change order protocol. In order to reach a fair agreement with owners, architects, engineers, general contractors and subcontractors, industry resources and documents will also be discussed.

Following this course participants will be able to:

- Discuss the impacts of scope creep and understand how to price the impact
- Explain schedule acceleration and understand how to price the impact
- Identify impacts of poor schedule management and understand how to price the impact
- Analyze direct costs, overhead-profit costs and consequential costs and impact factors.

Target audience: Owners, architects, engineers, general contractors and subcontractors and project managers
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University

Developing and Managing Project Schedules

Creating, and sticking to, project schedules will dramatically increase your project's chance of success. This course will review common forms of schedules, the impact of schedule changes and how to use the schedule to manage the project.

Following this course, participants will be able to:

- Identify scheduling best practices
- Create and differentiate between several different types of project schedules
- Discuss the relationship between the schedule and project management
- Discuss the impact of schedule compression and acceleration

Target audience: Project managers and field foremen
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University

Enable Success- Creating Alignment Between Field and Office

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.

Following this class, participants will be able to:

- 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

Duration: Half-day
CE Hours: 3 Hours
Instructor: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Essential Skills for Project Managers

Project managers must develop skills that go beyond technical expertise. While some consider these skills soft, in reality they are essential to the overall success of the project and the career of the project manager. This course focuses on key management skills, leadership and process improvement to develop the foundation of management expertise needed to manage the project from notice to proceed through project.

Following this class, participants will be able to:

- Understand their current skills related to:
  - Leadership Styles
  - Communication
  - Behave in the work setting
  - Their conflict resolution style
- Understand their role and responsibilities throughout the project life cycle
- Discuss how to improve field and office processes to reduce costs on a project and improve margin
- List the steps to develop the project team

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle Ph.D., P.E., CPC; Marquette University

Impacts and Tools for Managing Schedule Compression*

This course presents the impact of schedule compression on labor productivity for electrical contractors. Whether the compression is planned or simply the result of how the project is managed, the electrical contractor needs tools to assist them in quantifying the impact of schedule compression on the costs of completing the work for the project.

Following this class, participants will be able to:

- Estimate the impact of schedule compression on labor productivity
- Estimate the other costs associated with schedule compression
- Use various tools and approaches to compress a schedule
- Manage the potential losses in labor productivity and other project costs caused by schedule compression

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University

Introduction to Project Level Lean - What's the Big Deal

The construction industry is increasingly utilizing formal production management principles and techniques known as 'Lean Construction' to increase reliability, jobsite productivity, and superior control over schedule. Using case studies, this course provides participants with a clear understanding of the background of Lean in Construction, why it's important, why it's effective and why they should care.

Following this course, participants will be able to:

- Understand clearly what 'Lean' is and why the construction industry needs it
- Understand 'Lean' terminology and be able to define it relative to other Project Management processes
- Discuss real life examples of the various methods for implementation and the results it generates
- List best practices and common pitfalls

Target audience: Executive, Project Management, Field Leadership
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Stephane McShane, Brian Lightner or Sheri Pingel; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Labor Cost - Convert Your Biggest Risk To Your Biggest Advantage

Case studies demonstrate common myths of field productivity due to a fundamental misunderstanding of what productivity really is. Case studies provide step by step illustration for participants to simply and clearly define productivity and production. Case studies illustrate methodologies for measuring and managing jobsite productivity for sustainable, breakthrough performance gains.

Following this course, participants will be able to:

- Define and appropriately measure productivity
- Define and understand the mechanics of production
- Understand blind spots existing project management approaches have to productivity improvement and what to do about it
- Gain an introductory understanding, based on case studies, of how to measure cost of lost production and how to implement effective improvement routines

Target audience: Executive, Project Management, Field Leadership
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Multiple Instructors Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Managing Field Productivity

Electrical contracting is a high-risk and labor-intensive industry and the most volatile cost element facing contractors is field labor productivity. This course will focus on ways plan, measure and take corrective action to increase field productivity.

Following this course, participants will be able to:

- Identify risk factors affecting productivity, pre-job and pre-task planning
- Discuss how to plan for an increase of field productivity
- Explain productivity measurements and principles of improvement
- Identify how to take corrective action to increase field productivity

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Perform Like the Boss

This course will walk you through the main difference between the exiting electrical worker and the emerging electrical worker. What smart contractors are doing to develop the next generation electrician that will give them an edge over their competition will be discussed.

Following this course, participants will be able to:

- Identify the four core competencies lacking in most of the workforce entering the industry
- Describe the necessary steps one must take to develop core competencies in the workforce
- Discuss why traditional teaching styles are not effective on today's emerging workforce
- Identify the three mistakes we are all making with our current training
- Discuss the one critical change a contractor must make before developing their workforce

Target audience: Business owners, executive leadership
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Nic Bittle; Workforce Pro
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Pre-Construction Planning

A comprehensive pre-construction planning process can increase project profit margins and raise the likelihood of success. This course will focus on the major principles for successful pre- construction planning to create a process that extends though the bidding, pre-construction and project execution phases.

Following this course, participants will be able to:

- Discuss the value of pre-construction planning
- Develop a list of pre-construction activities to plan
- Discuss how to increase profit margins and project success
- List the steps for a formal pre-construction planning process

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Prefabrication and Preplanning Construction

Prefabrication can save an electrical contractor time and money, but what do you prefab? And how do you tackle the preplanning required to even get out of the gate? This program will discuss tactics to aid those at any step of the prefabrication process in optimizing their preplanning and increase their prefabrication efficiency.

This program is based on an ELECTRI International research report.

Following this course, participants will be able to:

- Discuss the importance of preplanning
- Identify planning strategies to improve productivity
- Identify activities at each phase of the construction process to preplan
- Utilize the benefits of activities such as prefabrication, lean construction, and building information modeling on preplanning
- Identify tactics that can increase the amount of prefabrication you do

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University

Preplanning Construction

Project managers and supervisors can dramatically improve the likelihood of a successful project by learning key concepts in project preplanning and implementing those concepts on their projects. This program will discuss the importance of preplanning and strategies to improve productivity and performance on a project.

Following this course, participants will be able to:

- Discuss the importance of Preplanning
- Identify planning strategies to improve productivity
- Identify activities at each phase of the construction process to pre-plan
- Discuss the benefits of activities such as prefabrication, lean construction and building information modeling on Preplanning

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University

Preplanning – Beyond the Basics

Preplanning is an important skill for project managers. This course will build upon the introductory Preplanning course and focus on enhancing the efforts related to pre-fabrication, lean construction, particularly with a focus on Preplanning to reduce waste and supporting the scheduling process with early identification of constraints. A deeper dive into the impact of schedule compression and "forced" acceleration by the construction manager and general contractor will also be provided.

Following this course, participants will be able to:

- Apply the concepts of Preplanning incorporated in the on-line Preplanning modules into a project Preplanning effort, both internally and external Preplanning meetings
- Incorporate Preplanning efforts into the overall prefabrication efforts
- Use lean construction techniques especially those related to waste reduction to improve the Preplanning process
- Develop strategies using Preplanning to better understand the cost and productivity impact on the electrical contractor when the CM/GC impact the electrical contractor with schedule compression and "forced" accelerations

Target audience: Experienced project managers and project managers looking to enhance their skills
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University

Process Driven Profitability

Well defined, scalable systems and processes deployed with technology and used consistently by everyone in the company are the foundation to minimizing risk and achieving predictable results. Many contractors know and understand this concept and many have, at some point, defined their processes. Perhaps they are sitting on a bookshelf right now and are rarely used or even referenced in order to understand the company procedures.

The more a company grows the more difficult it becomes to develop and deploy these systems. Yet the need increases dramatically. This program discusses how to define standard procedures in your organization, generate buy-in that will operationalize their use and how to utilize them as a platform to build bench depth that will move the organization to the next level.

Following this course, participants will be able to:

- Discuss the value of workflow documentation and provide examples of how best of class contractors develop and document standardize workflow
- Describe how to leverage technology in the deployment of standardized process and procedure that creates consistency and predictable results
- Identify the keys to successfully operationalizing processes including staff training and metrics that provide visibility on compliance and the bottom line impact

Target audience: Senior executives, financial managers and project managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Michael McLin, Stephane McShane or Sheri Pingel; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Production Tracking and the Detailing, Manufacturing and Installation Process

Tracking productivity has been a challenge for electrical contractors who are characterized by a high degree of offsite work such as detailing plans and off-site fabrication necessary to build a customer's project. There are few standards related to tracking productivity for off-site facets of construction and because of that, it remains unclear what best practices are applicable for these design-driven contractors to effectively track productivity. Traditionally electrical contractors have focused on tracking productivity in the field since it is often viewed as the most intensive and riskiest portion of the work. Labor costs typically account for anywhere from 30% to 70% of a project's costs depending on the type of work being performed, so a small improvement in labor productivity can yield substantial increases in profitability. However, there is a growing recognition that productivity tracking for electrical contractors should encompass the entire lifecycle of a project from initial design and engineering through punch list.

Following this course, participants will be able to:

- Differentiate tracking productivity approaches for engineering, off-site fabrication, and installation
- Setup a standard cost code structure for engineering, off-site fabrication, and installation
- Identify standard units of measure for each code, understand how to apply time to those codes, and report progress and benchmarking

Target audience: PM, Chief Estimator, Superintendent, and Upper Management
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Multiple Instructos Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Productivity and Bid Factors

The NEW NECA Factors include 18 elements used to create a definitive methodology for productivity analysis. The three key levels of productivity are identified as minor, moderate and severe. The NECA Factors methodology can be used proactively, to better anticipate schedule and cost estimates prior to the disruption in productivity, or retroactively, to aid in the settlement of claims.

"To Bid or Not to Bid?" The second component of the course features an analysis of factors that affect bid success. The "Hit Rate" for electrical contractors, the cost of bid preparation and other elements of successful bids are considered and assigned a numeric value. The course will teach the contractor how to use quantifiable figures to ensure that allocation of labor and estimated project duration are as accurate as possible.

Following this class, participants will be able to:

- List the 18 elements used to create productivity analysis
- Identify steps to anticipate schedule and cost estimates prior to the disruption in productivity
- Use quantifiable figures to ensure that allocation of labor and estimated project duration
- Explain the three major levels of productivity

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to Instructor fees. Contact the NECA Education team for details.

Project Financials that Every Project Manager Needs to Know

Project financials are a weakness is many organizations, yet our success with our banking and bonding partners relies heavily on this data. Many are left uncertain when it comes to knowing the outcome of projects while they are occurring and experience significant fade or gain at the end of the job that was not predicted. Financial acumen can be the line in the sand between staff being “project managers” versus “project witnesses.” The solution to this are defined standard practices to set your team up to win. In this session, we will discuss the importance of managing cash flow and how to produce accurate project forecasts.

Following this course, participants will be able to:
Outline best practices for producing stellar schedule of values
• Discuss billing and collections standards to focus on getting the cash in the door timely
• List the steps required to produce an accurate project forecast
• Show the tremendous affect labor productivity tracking has on the quality of project financial projections

Duration: Full-day
CE Hours: 6 Hours
Instructor: Multiple Instructos Available; Maxim Consulting Group

Project Managers Impact on Financial Outcomes

Attendees will have FUN as they work through a case study and uncover the math mystery buried in the WIP. Students will calculate each column by hand to see where the numbers come from and recognize which numbers provide the key information. The key information will spotlight problems and opportunities contained within the numbers of a financial report. Attendees will increase their financial fluency and be able to communicate more effectively t get the right information to make projects more profitable.

Following this course, participants will be able to:

- Know how project managers impact the company income statement and balance sheet
- Know how the WIP can effect year end profits and cash flow
- Understand Overbillings and underbilling's and the impact of each
- Analyze the difference between gross profit % and mark up %
- UnderstandWIP Case Study explaining what each column represents and where the math comes from
- Explain what percentage of completion accounting is and why it is used

Duration: Full-day
CE Hours: 6 Hours
Instructor: David Ashcraft; Advantage Learning Systems

Purchasing Best Practice

The second greatest risk for electrical contractors is the ability to positively affect the supply chain for materials. In this session, we will discuss concepts behind effective material planning strategies, enterprise level purchasing methodologies, and managing the service levels of our material vendors.

Following this course, participants will be able to:

- Properly leverage preconstruction planning to drive a proactive purchasing strategy
- Align risk management between labor and material in order to produce valuable project insight
- Vendor partnership agreement and vendor managed inventory structures and their proper deployment

Duration: Half-day
CE Hours: 3 Hours
Instructor: Multiple Instructos Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Project Scheduling

Many different types of schedules may be used on a construction project and a thorough understanding is essential to any electrical contractors. This course focuses on basic scheduling concepts, the use of the schedule as a project management tool and communication of scheduling information.

Following this course, participants will be able to:

- Describe the principles and practices of project scheduling
- Discuss arrow and precedence diagrams, bar charts and computational techniques
- Analyze scheduling concepts as project management tools
- Describe how to apply project and work breakdown structures

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to Instructor fees. Contact the NECA Education team for details.

Pull Planning

Pull planning is a lean technique that is being successfully deployed in the construction industry to help improve coordination, planning, and ultimately reduce overall schedule durations. Participants will review case studies demonstrating the inefficiencies experienced on projects due to out of sequence work. An introduction to pull planning techniques and terminology will allow participant to join in on two separate hands on activities that illustrate the productivity improvements experiences as a result of batch flow and sequential work. At the conclusion of the session, participants will be educated on the impacts and overall process of pull planning.

Following this course, participants will be able to:

- Understand the mechanics and terminology of pull planning
- Identify waste associated with out of sequence work
- Effectively participate in a pull planning session with owners or general contractors

Target audience: Sr Execs, Financial Managers and Project Managers, Field Managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructos Available; Maxim Consulting Group
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Schedule Compression

This course presents the development of the planned schedule compression concept file for electrical contractors. Each concept attempts to provide a significant, distinct, and executable objective for enhancing the construction process and minimizing the impacts of schedule compression. Twenty-nine different concepts are presented—seven of which have been selected from the concept file and are presented in their entirety.

Following this course, participants will be able to:

- Analyze the planned schedule compression concept file for electrical contractors
- Apply effective construction processes to projects
- Explain ways to minimize the impacts of schedule compression
- Differentiate significant concepts presented

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Standards and Safety

2023 NEC Significant Changes

The National Electrical Code® (NEC), the most widely recognized electrical Code in the world. Every three years it is updated to reflect the newest installation rules and practices used by the electrical industry. This presentation provides an authoritative, thorough review of the most significant changes in the 2023 NEC, including new articles and revised rules that contractors and installers alike must understand and apply in their daily operations. New technologies are emerging at a rapid pace and the latest edition of the NEC is staying relevant. 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 the installation and compliance.

Duration: Full-day
Continuing Education Hours: 6 hours
Instructors: James T. Dollard Jr.; Philadelphia Electrical JATC and/or Mike Johnston
Note: Special pricing applies due to the materials provided. Contact the NECA Education team for details.

Creating and Maintaining Effective Safety Programs

What are the characteristics and habits of a safe employee and how does their buy-in affect your company's safety culture? Who are the company leaders in the safety arena and how does safety improve the profitability of your company? This session will detail how to access the status of a company safety program and the understanding and retention of your company's safety training with employees. Significant updates that are necessary for contactors safety programs, including the latest OSHA activities that impact business, will be discussed.

Following this course, participants will be able to:

- Outline the key elements of a company safety program
- Identify the roles of supervisors in charge of safety
- Discuss the importance of a good safety record to a company
- Explain the impact safety has on company profit

Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Wesley Wheeler, SMS; NECA

Human Performance - Its Role in Electrical Operations and Safety Excellence

Studies show that the likelihood of a serious event being linked to human performance is 90 - 95% versus equipment failure 5 - 10%. Opportunities exist to significantly raise awareness in employees leading to behavior change. This program is designed to raise awareness to those behaviors that put our employees, operations and the public at risk.

Following this course, participants will be able to:

- Explain why employees are susceptible to human performance errors
- Recognize ways to enhance self-awareness
- Identify human behaviors that lead to "at risk" states
- Apply techniques that positively shape employee behaviors and prevent incidents

Target audience: Managers, supervisors and foremen
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Bruce Bolger; Bruce Bolger Company

Surviving Today's OSHA

This course provides insight into OSHA enforcement activity from the most frequently cited standards in electrical construction and emphasis programs through OSHA's new formula for penalty calculation. Participants will review pending regulations, including the Injury and Illness Prevention Program (I2P2), offering insight into the future of safety under the current administration and suggestions on dealing with OSHA's methods and changes.

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Joe O'Connor; INTEC

Temporary Power Installations

Description: Installing and maintaining temporary construction power that is integrated with electrical safety is an essential component of an electrical contractor's work. This course will provide valuable information on efficient and safe designs and installations of temporary construction power and review the requirements in the OSHA Regulations and the National Electrical Code.

Following this course participants will be able to:

- Identify wiring methods and equipment required for use in temporary power systems
- Explain how the NEC and OSHA standards apply to temporary power systems
- Discuss NEC wiring methods suitable for use in temporary wiring systems
- Give examples of proper wiring and protection installed for temporary wiring systems in addition to safety related work practices including lockout/tag-out and use of assured equipment grounding conductor programs.

Target audience: Electrical contractors, electricians, apprentices, supervisors, project managers, estimators, and instructors.
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Jim Dollard; Philadelphia Electrical JATC
Note: Special pricing applies due to the materials provided. Contact the NECA Education team for details.

Temporary Power Installations Plus

Description: Installing and maintaining temporary construction power that is integrated with electrical safety is an essential component of an electrical contractor's work. This course will provide valuable information on efficient and safe designs and installations of temporary construction power and review the requirements in the OSHA Regulations and the National Electrical Code.

This extended version will provide a more detailed review of how to use the additional materials provided in the Temporary Power Guide including: how to use the UL white book, how to implement an assured equipment grounding conductor program, how to build and implement an effective and prescriptive lockout tagout program, how to apply the NFPA 70E labeling requirements for temporary power, how to read and understand the requirements of OSHA 1926 Subpart K and the letters of interpretation and a review of NEC requirements in Chapter 1 through 4 and Article 590 as they apply to temporary power installations.

Following this course participants will be able to:

- Identify wiring methods and equipment required for use in temporary power systems
- Explain how the NEC and OSHA standards apply to temporary power systems
- Discuss NEC wiring methods suitable for use in temporary wiring systems
- Give examples of proper wiring and protection installed for temporary wiring systems in addition to safety related work practices including lockout/tag-out and use of assured equipment grounding conductor programs.
- Utilize the additional materials provided in the Temporary Power Guide

Target audience: Electrical Contractors, electricians, apprentices, supervisors, project managers, Estimators, and instructors.
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Jim Dollard; Philadelphia Electrical JATC
Note: Special pricing applies due to the materials provided. Contact the NECA Education team for details.

Technology, Process and Innovation

Developing an Agile Supply Chain Partnership

By using agile procurement, value may be delivered by engaging all supply chain members in partnering arrangements, to jointly manage the flow of material and create greater efficiency of operations. The goal of agile procurement is to reduce job site material handling and other waste rather than focusing upon reducing the cost of materials. In agile procurement, manufacturers, suppliers, distributors, and customers come together to define their common assumptions in terms of the business value, implementation risks, expenses (effort) and costs associated with procurement. Electrical contractors who partner with their suppliers can receive supplier services that can reduce contractor material handling time by a significant margin.

This program is based on the research report *Quality in Construction - Improving Productivity and Reducing Rework by Establishing a Built-in Quality (BIQ) Program* funded by ELECTRI International.

Following this course, participants will be able to:

- Understand how electrical contractors can improve communication and planning with distributors
- Recognize what value-added services distributors can perform, including: office and accounting, shipping and receiving, pre-installation, job site management and warehousing
- Analyze different opportunities that exist where electrical contractors can utilize manufacturer and distributor value added services
- Explain how agile procurement can improve efficiency, reduce waste and increase productivity

Target audience: Project managers, superintendents, purchasing agents, project engineers
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Lonny Simonian; Cal Poly State University San Luis Obispo

Driving Project Success

The driving project success module is a highly interactive session geared towards field leadership. Participants are immediately placed in the positions they find themselves every day – tasked to build a project without all the tools or information they need to get the project done. During the workshop, attendees learn about the importance of productivity, motivation, coaching, leadership, planning and technology to drive project performance. A full-scale BIM model of the project is utilized to demonstrate just how drastically technology and prefabrication are going to change the industry. This module sets the stage for the remaining content of the program by introducing all the concepts taught in the program.

Following this course, participants will be able to:

- Identify industry trends and changes
- Examine field management obstacles and opportunities
- Discuss how planning and communication impact productivity
- Describe how productivity is measured
- Discuss the impact of rework on productivity and project performance
- Identify the impact of BIM on project performance through improved planning and communication

Target audience: Senior executives, financial managers and project managers
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructors: Multiple Instructos Available; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

Establishing a Built-in Quality Program

BIQ is an application of lean construction that maximizes the value to a client and minimizes waste. BIQ process steps include Developing and confirming a mutual understanding of the work expectations from all external and internal customers. It also includes preparing a specific operations plan for the fabrication and installation of each piece of work. In addition, training workers on each of these operations and assuring that they have everything necessary prior to beginning their work. Lastly, implementing an audit assessment program that allows project participants to assess that the process was followed and the product conforms to expectations. This course will enable electrical contractors to create a quality plan template and develop a BIQ implementation plan.

This program is based on the research report *Electrical Distribution and Construction - Developing an Agile Supply Chain Partnership* funded by ELECTRI International.

Following this course, participants will be able to:

- Understand the current standard for quality in the electrical construction industry
- Analyze sample quality plan elements and your own current quality plan
- Recognize lean concepts applied to BIQ and how to add a BIQ process to your own quality plan
- Examine sample record/checklist forms and assess your current use
- Review sample BIQ narratives for work activities and specifications

Target audience: Project managers, project superintendents, project inspectors company QA/QC project engineers
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Lonny Simonian; Cal Poly State University San Luis Obispo

Industrialized Construction and the Application of Operations Science

Industrialized Construction is a strategy designed to reduce cost and more effectively control schedules without compromising quality and safety, by moving work offsite. This strategy can deliver significant benefits, but is not without challenges that have yet to be addressed by accepted project management practices. Industrialized Construction requires: 1). more detailed and better-quality engineering, 2). the ability to effectively manage supply chains, and 3). knowledge and application of production management including its underlying theory of Operations Science (OS).

OS is the study of the transformation of resources to create and distribute goods and services. OS focuses on the interaction between demand and production and the variability associated with either or both. OS also describes the set of buffers required to synchronize demand with production.

Based on the work of the Project Production Institute, this course will enable participants to understand the benefits of adopting a modern construction framework and enable companies to effectively deal with the new challenges of moving work offsite. Focuses include offsite fabrication, supply chain optimization, and design for offsite fabrication.

Following this course, participants will be able to:

- Understand the unique attributes of fabrication / job shop vs manufacturing and other forms of production systems
- Know the relationships between Utilization to Cycle Time, and Work in Progress to Cycle Time
- Learn how to map and model a Fabrication / Job Shop Production System
- Understand the Five Levers of Optimization and how they may be applied to a job shop
- Create a plan to implement course learning

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Duration**:** Full-day
Continuing Education Hours: 6 Hours
Instructor: Lonny Simonian and Paul Redden; Cal Poly State University San Luis Obispo

Lean Construction in Electrical Contracting

Lean Construction is a shift in thought process towards collaborative project efficiency and quality. This shift promotes delivery of projects to clients by maximizing value and minimizing waste, while pursuing perfection. The purpose of this course is to teach electrical contracting project managers and superintendents how to improve productivity through a focus on lean construction principles. Participants will learn strategies to reduce workflow variability and increase throughput in order to decrease waste and increase efficiency.

Following this course, participants will be able to:

- Develop a thought process to improve productivity based on lean construction principles
- Identify ways to encourage input and collaboration from all project team members
- Integrate methodologies that will allow a company to get to the root cause of a problem and use problem-solving statistical tools to solve it quickly
- Explain business needs such as product development, operations, technology, and customer relations

Target audience: Project managers and superintendents
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University

Project Delivery Systems and the Changing Role

For a construction project to begin on the right track, it is important to select the right project delivery system. There are a wide range of construction project delivery systems, each of which has advantages and disadvantages to consider before the project begins. This course provides a comprehensive analysis of each of these delivery systems, along with the risks involved.

Following this course, participants will be able to:

- Analyze various types of construction project delivery systems
- Identify advantages and disadvantages before the project begins
- List examples of the risks of delivery systems
- Select the best project delivery system

Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Dr. Awad Hanna; University of Wisconsin-Madison
Note: Special pricing applies due to instructor fees. Contact the NECA Education team for details.

The Evolution of the Electrical Contractor as an Integrator

The evolution of technology in the industry is creating an opportunity in what was once seen as a commodity – the installation of low voltage cabling and devices. Technology adoption in infrastructure, industrial, and commercial projects continues to advance further fragmenting installer expertise. Electrical contractors that can be flexible, bringing a solutions-oriented approach to client needs and serving as an integrator will be positioned to capture this growing segment of the market. We will use examples and case studies within the market to demonstrate the growth of the market and the impact on contractors.

Following this course, participants will be able to:

- Present an overview of the low voltage and automation market segments that are evolving and their projected growth
- List scopes of services by contractors that are necessary to meet that growth
- Explain methods of entering the market and go-to market strategies
- Discuss an organizational structure, roles and responsibilities and necessary certifications/field skills necessary

Target audience: Executives and Business Development
Duration: Half-day
Continuing Education Hours: 3 Hours
Instructor: Multiple Instructors; Maxim Consulting Group
Note: Combine two Maxim programs to make a full-day course! Special pricing applies due to instructor fees. Contact the NECA Education team for details.

The Future is Now – BIM

Building Information Modeling (BIM) is a process that goes far beyond switching to new software, it requires changes to traditional phases and more data sharing than is common during the design and construction stages. Electrical contractors, manufacturers, suppliers and distributors are often short-changed during the MEP coordination process due to their under-utilization of technology, such as BIM, which can be used to assist them in performing Preplanning and pre-fabrication. This course focuses on what electrical contractors need to know about BIM and the process of generating and managing building data during its lifecycle.

This program is based on the research report *Building Information Modeling for Electrical Contractors: Current Practice and Recommendations* funded by ELECTRI International.

Following this course, participants will be able to:

- Discuss the design and construction stages of a project when using BIM
- Explain how to use the BIM process for Preplanning and pre-fabricating
- Discuss design and clash detection software
- Describe the potential cost and time savings with BIM
- Discuss the current status of BIIM in the electrical contracting industry

Target audience: Individuals at all levels in electrical contracting firms.
Duration: Full-day
Continuing Education Hours: 6 Hours
Instructor: Lonny Simonian; Cal Poly State University San Luis Obispo

Understanding Project Delivery Systems and their impact on Electrical Contractors

Over the past couple decades the use of various project delivery systems has continued to grow impacting electrical contractors. Each project delivery method has inherent advantages and disadvantages that need to be considered during the proposal, estimating and pricing phases of the project – well before signing a contract. This course will review the project delivery methods and identify the risks of that method and how it impacts the electrical contractor.

Following this course, participants will be able to:

- Differentiate project delivery methods
- Compare the advantages and disadvantages of each method
- Analyze the risks of project delivery methods
- Consider the risks and price those risks prior to contract signing

Duration: half-day
Continuing Education Hours: 6 Hours
Instructor: Mark Federle, Ph.D., P.E., CPC; Marquette University