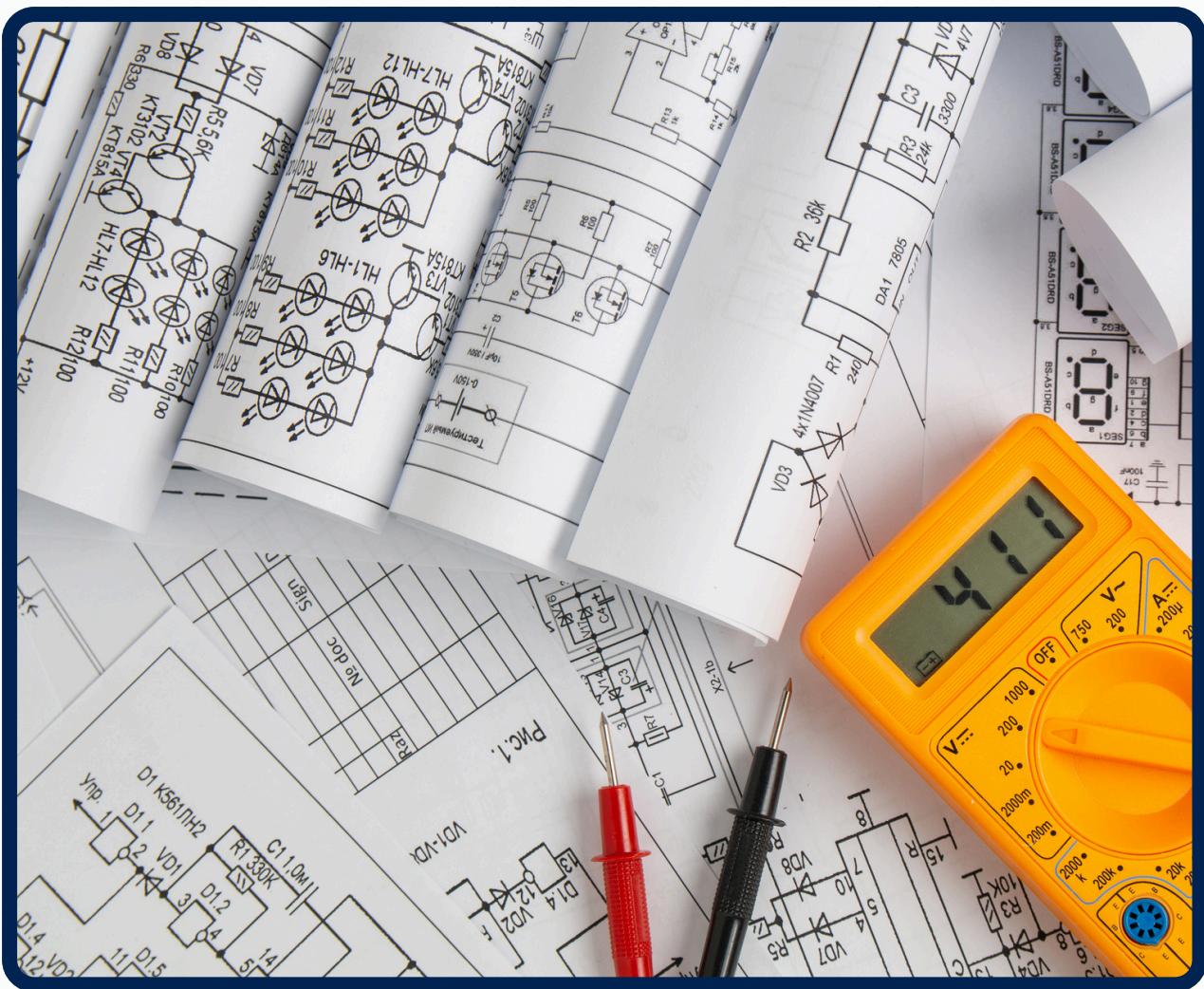


# ELECTRICAL DRAWING AND WIRING



## OUR ACCREDITATION & PARTNERS



# ELECTRICAL DRAWING AND WIRING



## OVERALL DESCRIPTION:

In a world where operational efficiency and safety are non-negotiable, the ability to read and understand electrical drawings is no longer a niche skill—it's a fundamental requirement for anyone involved in technical operations. This course is your strategic investment in that capability. We go beyond theoretical concepts, diving straight into the practical application of interpreting electrical schematics, symbols, and wiring diagrams. This hands-on, immersive training ensures you'll be able to confidently troubleshoot, install, and manage electrical systems, ultimately reducing project risk, enhancing safety compliance, and boosting your company's bottom line. It's about turning complex diagrams into clear, actionable business insights.

## Course Objectives:

**Upon completion of this course, participants will have the knowledge and skills to:**

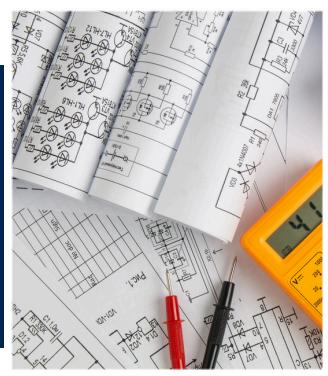
- Comprehend & Interpret: Confidently read and interpret a wide range of electrical drawings, including single-line, schematic, and wiring diagrams.
- Identify & Utilize: Recognize and understand standard electrical symbols, abbreviations, and notations in accordance with industry best practices.
- Practical Application: Apply theoretical knowledge to practical scenarios, such as troubleshooting circuits, performing installations, and ensuring compliance with safety standards.
- Create & Modify: Develop the foundational skills necessary to create basic electrical drawings and modify existing ones.
- System-Wide Thinking: Gain a holistic understanding of how electrical drawings connect to larger system operations and maintenance protocols, from power distribution to control circuits.

## Course Outline:

### The Language of Electricity

- Introduction to electrical diagrams and their business significance.
- Overview of industry standards (e.g., IEC, ANSI) and safety protocols.
- Decoding electrical symbols, abbreviations, and notations.

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## Course Outline:

### Types of Electrical Drawings

- Single-Line Diagrams: Understanding power distribution and system overview.
- Schematic Diagrams: Tracing the logic of control circuits.
- Wiring Diagrams: Practical connection points and physical layouts.

### Components and Circuitry in Practice

- Exploring key components: Fuses, circuit breakers, contactors, relays, and more.
- Practical circuit analysis: Understanding series, parallel, and combination circuits.
- Hands-on exercises in circuit tracing and fault finding.

### Reading Blueprints & System Integration

- Navigating complex multi-page drawings and documentation.
- Interpreting ladder logic diagrams for industrial control circuits.
- Case studies: Applying knowledge to real-world installations and maintenance tasks.

### Practical Wiring & Documentation

- Best practices for physical wiring and termination.
- Creating and updating simple wiring diagrams using a standardized approach.
- Ensuring quality control and proper documentation for all electrical projects.

## WHO SHOULD ATTEND?

This course is designed for a broad range of professionals who require a deep, practical understanding of electrical systems. This includes, but is not limited to:

- Maintenance & Technical Staff: Technicians and engineers responsible for installation, troubleshooting, and repair.
- Project Managers: Individuals overseeing projects that involve electrical systems and need to interpret blueprints and communicate with technical teams.
- Facility Managers: Professionals responsible for the operational safety and efficiency of buildings and industrial sites.
- Safety Officers: Personnel who need to ensure compliance with electrical safety regulations and standards.
- Aspiring Engineers: Individuals seeking to build a strong, practical foundation in electrical systems.

## Course Methodology:

We utilize a variety of proven adult learning techniques to ensure maximum understanding, comprehension and retention of the information presented. This training course will be conducted as a highly interactive workshop session. A variety of training methodologies will be used Before and during the course whenever applicable. Some of these methods are gamification, online pre-post test, role plays, self-assessment instruments, group exercises & case studies.