



Content
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Autocad Electrical Training

Course details: <https://electricityforum.com/electrical-training/autocad-electrical-training>

COURSE DATES AND TIMES

AutoCAD Electrical Training is a comprehensive program designed to help individuals gain proficiency in electrical design, drafting, and automation using AutoCAD Electrical software. This course covers various aspects of electrical engineering, including electrical schematics, circuit design, control panel design, and PLC programming.

The benefits of taking AutoCAD Electrical Training are many. This program provides individuals with a strong foundation in electrical design and drafting, allowing them to create accurate and detailed schematics and drawings. Participants will also learn how to use AutoCAD Electrical software to automate repetitive tasks, saving time and increasing efficiency. Additionally, this training teaches participants how to design and build control panels, an essential component of any electrical system.

This course is ideal for electrical engineers, technicians, drafters, and anyone interested in learning how to use AutoCAD Electrical for electrical design and drafting. Whether you are new to AutoCAD Electrical or seeking to enhance your existing skills, this course provides valuable knowledge and expertise.

Throughout the course, participants will learn a variety of skills, including electrical drafting, CAD training, circuit design, and PLC programming. Additionally, this training covers essential topics such as electrical automation, which is critical in today's fast-paced industrial environment.

WHO SHOULD ATTEND

- Electrical Engineers
- Electrical Project Managers
- Electrical Estimators
- Electrical Contractor/Service Professionals
- Electrical Foremen/Supervisors
- Industrial, Commercial And Institutional Electrical Construction And Maintenance Personnel

STUDENTS RECEIVE

- 100-Page Handbook - Value \$20
- 1.2 Continuing Education Unit (CEU) Credits (12 Professional Development Hours)
- A **FREE** Magazine Subscription (Value \$25)
- **\$100** Coupon Toward Any Future Electricity Forum Event (Restrictions Apply)
- Course Materials In PDF Format

COURSE OUTLINE

AutoCAD Electrical Training Course Outline

Day 1:

Morning Session (4 hours)

Introduction to AutoCAD Electrical

- Overview of AutoCAD Electrical features and capabilities
- Comparison to traditional AutoCAD software
- Understanding the electrical drafting environment
- Overview of key electrical drafting tools and functions

User Interface and Navigation

- Familiarizing with the AutoCAD Electrical user interface
- Understanding the ribbon, toolbars, and menus
- Navigation techniques, such as zooming and panning
- Using viewports and model space effectively

Electrical Drawing Fundamentals

- Understanding the basics of electrical drawings
- Common electrical symbols and conventions
- Creating and editing wire styles and layers
- Understanding the use of blocks and attributes in electrical drawings

Creating and Editing Schematic Diagrams

- Understanding the different types of schematic diagrams
- Creating and editing single-line diagrams
- Creating and editing multi-line diagrams
- Inserting and editing electrical components, such as switches, relays, and motors

Day 1:

Afternoon Session (4 hours)

Circuit Design and Analysis

- Understanding the principles of circuit design
- Using AutoCAD Electrical tools to analyze circuits
- Adding and editing circuit annotations and markers
- Creating and editing circuit reports and summaries

Creating and Editing Panel Layouts

- Understanding the basics of panel layout design
- Inserting and editing panel layout components, such as relays and transformers
- Creating and editing panel layout drawings
- Understanding the use of wire labels and tags in panel layout design

Adding and Editing Terminal Blocks

- Understanding the principles of terminal block design
- Inserting and editing terminal blocks in schematic diagrams
- Creating and editing terminal block drawings
- Understanding the use of cross-referencing in terminal block design

Creating and Editing Wire Lists and Bills of Materials

- Understanding the basics of wire lists and bills of materials
- Creating and editing wire lists and bills of materials
- Understanding the use of reports and summaries in wire list and BOM creation
- Using AutoCAD Electrical tools to generate wire lists and BOMs automatically

Automating Electrical Tasks with AutoCAD Electrical

- Understanding the principles of automation in electrical design and drafting
- Creating and editing automation scripts and macros
- Using AutoCAD Electrical's built-in automation tools and functions
- Understanding the use of databases and data exchange in automation

Day 2:

Morning Session (4 hours)

Introduction to PLC Programming

- Understanding the basics of PLC programming
- Overview of different PLC platforms and hardware
- Comparison of ladder logic, function block diagrams, and structured text programming languages
- Understanding the role of PLC programming in electrical design and automation

Creating and Editing Ladder Diagrams

- Understanding the basics of ladder logic programming

- Creating and editing ladder diagrams in AutoCAD Electrical
- Understanding the use of contacts, coils, timers, and counters in ladder logic
- Using AutoCAD Electrical tools to analyze and troubleshoot ladder diagrams

Editing and Configuring PLC I/O

- Understanding the basics of PLC input/output (I/O) configuration
- Adding and editing I/O components in AutoCAD Electrical
- Understanding the use of address allocation and mapping in I/O configuration
- Using AutoCAD Electrical tools to troubleshoot I/O issues

Creating and Editing Cross-Referencing

- Understanding the importance of cross-referencing in electrical design and drafting
- Using AutoCAD Electrical tools to create and edit cross-references
- Understanding the use of cross-referencing in schematic diagrams and panel layouts
- Troubleshooting cross-referencing issues in AutoCAD Electrical

Creating and Editing Reports

- Understanding the importance of reports in electrical design and drafting
- Creating and editing reports using AutoCAD Electrical tools
- Understanding the use of reports for project management and quality assurance
- Automating report generation with AutoCAD Electrical's built-in tools and functions

Day 2:

Afternoon Session (4 hours)

Introduction to Control Panel Design

- Understanding the basics of control panel design
- Overview of different control panel components and hardware
- Comparison of different control panel types and layouts
- Understanding the role of control panel design in electrical automation

Creating and Editing Panel Drawings

- Understanding the basics of panel drawing creation and editing
- Using AutoCAD Electrical tools to create and edit panel drawings
- Understanding the use of blocks and attributes in panel drawing creation
- Troubleshooting common issues in panel drawing creation

Creating and Editing Panel Layouts

- Understanding the basics of panel layout design
- Inserting and editing panel layout components, such as relays and transformers
- Creating and editing panel layout drawings
- Understanding the use of wire labels and tags in panel layout design

Creating and Editing Panel Wiring Diagrams

- Understanding the basics of panel wiring diagram creation and editing
- Using AutoCAD Electrical tools to create and edit panel wiring diagrams
- Understanding the use of wire numbering and color coding in panel wiring diagrams
- Troubleshooting common issues in panel wiring diagram creation

Creating and Editing Panel Schedules

- Understanding the basics of panel schedule creation and editing
- Creating and editing panel schedules using AutoCAD Electrical tools
- Understanding the use of schedules for project management and quality assurance
- Automating panel schedule generation with AutoCAD Electrical's built-in tools and functions.

COURSE SCHEDULE

Start: 10 a.m. Eastern Time

Finish: 4:30 p.m. Eastern Time

Contact us Today for a FREE quotation to deliver this course at your company's location.

<https://electricityforum.com/onsite-requestforquote>