



Overview

The **AutoCAD® Electrical Essentials** course covers the indispensable core topics for working with the AutoCAD® Electrical software. In this course, you will learn how to use many of the powerful electrical drawing creation tools in the AutoCAD Electrical software. You will create schematic drawings (ladder logic and point to point), **panel drawings**, and PLC-I/O circuits using automated commands for symbol insertion, component tagging, wire numbering, and drawing modification. In addition, you are introduced to methods of customizing AutoCAD Electrical symbols, circuits, and databases. Other topics covered include **title block linking, reporting tools, templates, and project files.**

Features and Benefits

1. The CAD Corporation (Pty) Ltd is a **registered Autodesk Training Provider.**

2. Get **12 months** access to your course via our **myWay Learning Platform** that includes video lectures, extra resources, questionnaires and much more.
3. Take full advantage of our new **Hybrid Learning** by attending on **campus** or **virtually**. Have all your classes ready to be **downloaded** and **watched**, anytime, anywhere.

4. Attendees will **gain confidence** and enhance their practical skills and knowledge in this field.
5. AutoCAD Electrical is a powerful AutoCAD add-on for **electrical designers and engineers.**

Course Prerequisites

It is recommended that delegates have a working knowledge of one or more of the following:

- Proficient in using AutoCAD or have attended AutoCAD Essential

Delivery Methods

- Campus-based
- On-Site
- Virtual Live
- Online Self-paced

Duration

In Class/Virtual Class, Hybrid Learning

3 Days (08:30 – 16:00) Classes are presented via our **Hybrid Learning** allowing learners the **flexibility** to attend on campus or in the comfort of their home or workplace.

Payment Options

Full course fee payable upfront or apply for our 3 Month Finance Option (Deposit R2000 upfront, 3 Months' payment terms)

An **additional fee** is payable for accredited courses & exam vouchers.

Course Accreditations

- The CAD Corporation (Pty) Ltd is a registered Autodesk Training Provider.

What you get

On completion the learner will earn:

- **Certificate of Completion** from **The CAD Corporation (Pty) Ltd**
- There are no official exams for this course

Note: All certificates are electronically issued.

Course Outline

Module 1: Introduction to AutoCAD Electrical

- What is AutoCAD Electrical?
- Drawing Files
- Electrical Components and Wires
- Design Methodologies

Module 2: Project Files

- Project Manager Interface
- Accessing Project Files
- Opening a Drawing
- Creating a Drawing
- Add a Drawing to a Project File
- Managing Drawings in Projects
- Project Manager Drawing List

Module 3: Schematics I - Single Wires/Components

- Referencing
- Ladders
- Insert Wires
- Edit Wires
- Add Rungs
- Wire Setup
- Wire Numbers
- Source & Destination Signal Arrows
- Insert Component
- Parent/Child Components

Module 4: Schematics II - Multiwire and Circuits

- Dashed Link Lines
- 3-Phase Ladders
- Multiple Wire Bus
- 3-Phase Components
- 3-Phase Wire Numbering
- Cable Markers
- Fan In/Out
- Insert Saved Circuits
- Save Circuits to Icon Menu
- Wblock Circuits
- Copy Circuit
- Move Circuit
- Circuit Clipboard
- Circuit Builder

Module 5: Editing Commands

- Edit Component
- Updating Drawings
- Scoot
- Move Component
- Copy Component
- Align
- Delete Component
- Surfer Command
- Copy Catalog Assignment
- Copy Installation/Location Code Values
- Attribute Editing Commands

Module 6: Panel Drawings

- Insert Footprint (Icon Menu)
- Insert Footprint (Schematic List)
- Insert Component (Panel List)
- Edit Footprint
- Assign Item Numbers
- Add Balloons

Module 7: Terminals

- Insert Terminal Symbols
- Multiple Level Terminals
- Multiple Insert Component Command
- Insert Jumpers
- Terminal Strip Editor
- DIN Rail Command

Module 8: PLC Symbols

- Insert PLC (Parametric)
- Insert PLC (Full Units)
- Insert Individual PLC I/O Points
- PLC Based Tagging
- Spreadsheet to PLC I/O Utility

Module 9: Point-to-Point Wiring Drawings

- Insert Connectors
- Edit Connectors
- Insert Splices
- Insert Multiple Wires
- Bend Wires

Module 10: Symbol Creation

- Schematic Symbols
- Naming Convention
- Icon Menu Wizard
- AutoCAD Electrical Databases
- Project Database
- Catalog Database
- Footprint Lookup Database
- PLC Database

Module 11: Title blocks

- Update Titleblocks
- Titleblock Setup

Module 12: Reporting Tools

- Create Reports
- Configure Report Templates
- Running Automatic Reports
- Electrical Audit

Module 13: Settings and Templates

- Project Properties
- Drawing Properties
- Panel Drawing Configuration
- Template Files
- Sharing Symbol Libraries and Databases

Module 14: Drawing Update Tools

- Project-Wide Update/Retag
- Project-Wide Utilities
- Plot Project
- Export to Spreadsheet
- Update from Spreadsheet
- Copy Project
- Swap/Update Block
- Mark/Verify Drawings

For more information, please contact a student advisor:

JHB: 011 262 2054 | CTN: 021 531 6803 | info@cadco.co.za | www.cadco.co.za