



## POWER AND ELECTRICAL TRAINING

# Electrical Drawings and Control Circuits

5 day course

Classroom, online or in-house

## Course overview

Being unable to read a drawing accurately is a common and expensive limitation in electrical maintenance work. This course builds that skill. Delegates work through drawing types and conventions, single line and schematic diagrams, wiring and termination drawings, and the symbols and reference designation systems in common use. The second half covers control circuits themselves: contactor and relay logic, motor control circuits, interlocking, and the tracing of a circuit from drawing to installed hardware. Delegates practise fault finding from drawings throughout, working from a described symptom to the likely cause using only the documentation.

## What you will learn

- Identify drawing types and the conventions each follows
- Read single line, schematic, wiring and termination drawings
- Interpret symbols and reference designation systems
- Follow contactor and relay control logic through a schematic
- Trace a circuit from drawing to installed hardware
- Diagnose a described fault using drawings alone
- Mark up drawings correctly to reflect an installed change

## Who should attend

- Electrical technicians and artisans
- Maintenance staff and plant electricians
- Control and instrumentation technicians
- Engineers new to industrial electrical work
- Technical supervisors reviewing electrical work

## Course outline

- 01 Drawing types and conventions
- 02 Single line diagrams
- 03 Schematic and control circuit diagrams
- 04 Wiring, termination and cable schedules
- 05 Symbols and reference designation systems
- 06 Contactor and relay logic
- 07 Motor control circuits and interlocking
- 08 Fault finding from drawings, and marking up changes

## Upcoming dates

| Dates                  | Venue                   | Format    | Fee per delegate |
|------------------------|-------------------------|-----------|------------------|
| 9 to 13 October 2026   | Kampala, Uganda         | Classroom | R11,995          |
| 16 to 20 October 2026  | Nairobi, Kenya          | Classroom | R11,995          |
| 9 to 13 November 2026  | Lilongwe, Malawi        | Classroom | R11,995          |
| 22 to 26 November 2026 | Dar es Salaam, Tanzania | Classroom | R11,995          |



## Fees and how to register

Online **from R6,500** per delegate, classroom **from R11,995** per delegate, in-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit [www.afrisciencegroup.com](http://www.afrisciencegroup.com), email [info@afriScience.co.za](mailto:info@afriScience.co.za), or WhatsApp us on **+27 63 479 1136**.

AfriScience Group | +27 61 536 6531 | [info@afriScience.co.za](mailto:info@afriScience.co.za) | Pretoria, Gauteng, South Africa