



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
23 to 27 November 2026	Online	Online	R8,500
14 to 18 December 2026	Pretoria, South Africa	Classroom	R19,950
28 December 2026 to 1 January 2027	Lagos, Nigeria	Classroom	USD 1,325
11 to 15 January 2027	Nairobi, Kenya	Classroom	USD 1,325



Fees and how to register

This 5 day course is **R8,500** per delegate online, **R19,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 1,325** in the classroom elsewhere in Africa. 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, email info@afriscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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