



POWER AND ELECTRICAL TRAINING

Advanced Low Voltage Electrical Troubleshooting

5 day course

Classroom, online or in-house

Course overview

Low voltage faults are the ones technicians meet most often and the ones most often fixed by replacement rather than diagnosis, which is why the same fault returns. This course builds the diagnostic method. Delegates work through reading the installation from its drawings, using test instruments correctly and understanding what each reading actually proves, and a structured approach to isolating a fault to a circuit, a component or a supply. Intermittent faults, voltage drop, nuisance tripping and earth leakage are each traced from symptom to cause. The course is built on fault finding exercises and closes on safe working and proving dead before contact.

What you will learn

- Read an installation from its drawings before touching it
- Use test instruments correctly and know what a reading proves
- Isolate a fault to a circuit, component or supply systematically
- Diagnose nuisance tripping and earth leakage
- Trace voltage drop and its consequences
- Trap and diagnose intermittent faults
- Work safely and prove dead before contact

Who should attend

- Electricians and electrical technicians
- Maintenance and facilities staff
- Plant electricians in industry
- Technical supervisors
- Apprentices completing their training

Course outline

- 01 Why the same fault keeps returning
- 02 Reading the installation from drawings
- 03 Test instruments and what each reading proves
- 04 Structured fault isolation
- 05 Nuisance tripping and earth leakage
- 06 Voltage drop and its symptoms
- 07 Intermittent faults
- 08 Safe working and proving dead

Upcoming dates

Dates	Venue	Format	Fee per delegate
2 to 6 November 2026	Gaborone, Botswana	Classroom	R19,950
7 to 11 December 2026	Online	Online	R8,500
28 December 2026 to 1 January 2027	Johannesburg, South Africa	Classroom	R19,950
8 to 12 February 2027	Accra, Ghana	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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