



POWER AND ELECTRICAL TRAINING

Switchgear Operation and Maintenance for Low, Medium and High Voltage

5 day course

Classroom, online or in-house

Course overview

Switchgear spends most of its life doing nothing and is then asked to interrupt a fault correctly on the first attempt. This course covers keeping it able to. Delegates work through switchgear types and construction across low, medium and high voltage, interrupting technologies and their maintenance implications, and the mechanisms, contacts and insulation that determine whether an operation succeeds. Testing covers contact resistance, timing, insulation and partial discharge. Operating practice, interlocking and safe switching sequences are covered alongside the condition assessment that decides between servicing, refurbishment and replacement of a switchboard that is no longer supported by its manufacturer.

What you will learn

- Describe switchgear types and construction across the voltage range
- Compare interrupting technologies and their maintenance implications
- Maintain mechanisms, contacts and insulation systems
- Carry out and interpret contact resistance, timing and insulation tests
- Apply interlocking and safe switching practice
- Assess condition to choose between service, refurbishment and replacement
- Manage switchgear no longer supported by its manufacturer

Who should attend

- Electrical engineers and technicians
- Substation and switching personnel
- Maintenance and testing staff
- Asset and reliability engineers
- Technical supervisors responsible for switchboards

Course outline

- 01 Switchgear types and construction from low to high voltage
- 02 Interrupting technologies and their implications
- 03 Mechanisms, contacts and insulation systems
- 04 Contact resistance and timing testing
- 05 Insulation and partial discharge testing
- 06 Interlocking and safe switching practice
- 07 Condition assessment and the service or replace decision
- 08 Obsolete and unsupported switchgear

Upcoming dates

Dates	Venue	Format	Fee per delegate
5 to 9 October 2026	Kigali, Rwanda	Classroom	USD 1,325
9 to 13 November 2026	Online	Online	R8,500
28 December 2026 to 1 January 2027	Cape Town, South Africa	Classroom	R19,950
8 to 12 March 2027	Johannesburg, South Africa	Classroom	R19,950



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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