



POWER AND ELECTRICAL TRAINING

Protection Relay Installation, Configuration and Commissioning

5 day course

Classroom, online or in-house

Course overview

A numerical relay is a computer with a trip contact, and the gap between a correct setting file and a correctly working scheme is where commissioning errors live. This course covers closing it. Delegates work through relay hardware and wiring, configuration and the settings file including the logic that is easy to get subtly wrong, and communications configuration. Testing covers secondary injection of each function, end to end scheme testing and the verification that a trip actually reaches the breaker it should. Version control of settings, as built documentation and the management of a settings change on a live system close the course.

What you will learn

- Install and wire a numerical relay correctly
- Build a settings file, including programmable logic
- Configure communications and integrate the relay into a scheme
- Test each protection function by secondary injection
- Carry out end to end scheme testing to the breaker
- Version control settings and produce as built documentation
- Manage a settings change on a live system safely

Who should attend

- Protection and commissioning engineers and technicians
- Electrical maintenance staff in utilities and industry
- Substation engineers
- Contractors installing protection schemes
- Technical staff auditing protection settings

Course outline

- 01 The gap between a settings file and a working scheme
- 02 Relay hardware, wiring and current transformer circuits
- 03 Settings and programmable logic
- 04 Communications configuration
- 05 Secondary injection of each function
- 06 End to end scheme testing
- 07 Verifying the trip reaches the breaker
- 08 Settings version control and live changes

Upcoming dates

Dates	Venue	Format	Fee per delegate
12 to 16 October 2026	Cape Town, South Africa	Classroom	R19,950
19 to 23 October 2026	Durban, South Africa	Classroom	R19,950
28 December 2026 to 1 January 2027	Maputo, Mozambique	Classroom	USD 1,325
11 to 15 January 2027	Kampala, Uganda	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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