



POWER AND ELECTRICAL TRAINING

Transmission Line Protection

5 day course

Classroom, online or in-house

Course overview

A transmission line is long, exposed and electrically complex, which is why its protection is the most demanding application in the discipline. This course covers it in depth. Delegates work through line parameters and fault behaviour, distance protection zones, characteristics and the settings that follow, and the effects that mislead a distance relay including infeed, mutual coupling on parallel circuits and series compensation. Differential and directional comparison schemes are covered along with the signalling they depend on. Autoreclosing, single pole tripping and the coordination between them complete the programme, and the course closes on analysing a real line fault record.

What you will learn

- Calculate line parameters and analyse fault behaviour
- Set distance protection zones and select characteristics
- Account for infeed, mutual coupling and series compensation
- Apply differential and directional comparison schemes
- Specify the signalling a unit scheme depends on
- Configure autoreclosing and single pole tripping
- Analyse a line fault record and explain the relay's behaviour

Who should attend

- Protection engineers and technicians
- Transmission and utility engineers
- Testing and commissioning staff
- Consulting engineers in power systems
- Control centre engineers investigating events

Course outline

- 01 Line parameters and fault behaviour
- 02 Distance protection principles and zones
- 03 Characteristics and setting calculation
- 04 Infeed, mutual coupling and series compensation
- 05 Differential and directional comparison schemes
- 06 Signalling and teleprotection
- 07 Autoreclosing and single pole tripping
- 08 Fault record analysis

Upcoming dates

Dates	Venue	Format	Fee per delegate
21 to 25 September 2026	Kampala, Uganda	Classroom	USD 1,325
16 to 20 November 2026	Pretoria, South Africa	Classroom	R19,950
23 to 27 November 2026	Harare, Zimbabwe	Classroom	USD 1,325
14 to 18 December 2026	Online	Online	R8,500



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@afri-science.co.za, or WhatsApp us on **+27 63 479 1136**.

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