



POWER AND ELECTRICAL TRAINING

Arc Flash Study and Calculation

3 day course

Classroom, online or in-house

Course overview

An arc flash study converts a network model into the incident energy a worker would be exposed to at each point, and the result governs what they may wear and how they may work. This course covers producing one. Delegates work through the physics of an arcing fault, the data collection that determines whether a study means anything, and short circuit and protection coordination as the prerequisites. Incident energy calculation is worked through by hand before any software, so delegates understand what drives the result, particularly clearing time. Labelling, protective equipment selection and the working practices that reduce exposure follow, and the course closes on maintaining a study as a network changes.

What you will learn

- Explain the physics of an arcing fault and what drives incident energy
- Collect the data a study depends on and recognise when it is inadequate
- Complete short circuit and coordination study prerequisites
- Calculate incident energy and arc flash boundary by hand
- Interpret how clearing time dominates the result
- Produce labels and select protective equipment from the result
- Maintain a study as the network changes

Who should attend

- Electrical engineers and safety engineers
- Protection and design engineers
- Electrical safety officers and authorising officers
- Maintenance managers
- Consultants producing arc flash studies

Course outline

- 01 The physics of an arcing fault
- 02 Data collection and study validity
- 03 Short circuit study prerequisites
- 04 Protection coordination and clearing time
- 05 Incident energy calculation by hand
- 06 Arc flash boundary and labelling
- 07 Protective equipment selection
- 08 Reducing exposure, and maintaining the study

Upcoming dates

Dates	Venue	Format	Fee per delegate
2 to 4 November 2026	Harare, Zimbabwe	Classroom	USD 995
11 to 13 November 2026	Online	Online	R6,500
11 to 13 January 2027	Accra, Ghana	Classroom	USD 995
18 to 20 January 2027	Cape Town, South Africa	Classroom	R14,950



Fees and how to register

This 3 day course is **R6,500** per delegate online, **R14,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 995** 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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