



POWER AND ELECTRICAL TRAINING

Oil and Gas Electrical and Instrumentation Engineering

5 day course

Classroom, online or in-house

Course overview

Electrical and instrumentation work on oil and gas facilities carries constraints that do not apply elsewhere: classified areas everywhere, safety instrumented functions with integrity requirements, and the fact that an isolation error can release hydrocarbon. This course covers the discipline in that setting. Delegates work through power distribution on process facilities, hazardous area equipment selection and installation, and instrumentation for the process measurements that matter. Safety instrumented systems and their integrity requirements are covered, along with fire and gas detection. The course closes on inspection, maintenance and the permit and isolation regime that governs all of it.

What you will learn

- Design power distribution for a process facility
- Select and install equipment for classified areas
- Specify instrumentation for the critical process measurements
- Apply safety instrumented system requirements and integrity levels
- Design and maintain fire and gas detection
- Plan inspection and maintenance in a hydrocarbon environment
- Work within the permit and isolation regime

Who should attend

- Electrical and instrumentation engineers in oil and gas
- Maintenance and inspection staff on process facilities
- Project and commissioning engineers
- Process safety professionals
- Contractors working on hydrocarbon facilities

Course outline

- 01 What makes this setting different
- 02 Power distribution on a process facility
- 03 Hazardous area equipment selection and installation
- 04 Process instrumentation and critical measurements
- 05 Safety instrumented systems and integrity levels
- 06 Fire and gas detection
- 07 Inspection and maintenance regimes
- 08 Permits, isolation and the hydrocarbon risk

Upcoming dates

Dates	Venue	Format	Fee per delegate
28 September to 2 October 2026	Johannesburg, South Africa	Classroom	R19,950
5 to 9 October 2026	Dar es Salaam, Tanzania	Classroom	USD 1,325
2 to 6 November 2026	Online	Online	R8,500
7 to 11 December 2026	Kigali, Rwanda	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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