



HEALTH, SAFETY AND SECURITY TRAINING

Risk, Reliability and Safety Management for Critical Assets

3 day course

Classroom, online or in-house

Course overview

Asset failure and human harm are usually two views of the same event, yet reliability and safety are managed by separate teams using different language and rarely comparing their lists of critical equipment. This course connects them. Delegates work through criticality assessment that accounts for both production loss and harm potential, failure data and the reliability measures built on it, and the barrier thinking that links a failure mode to a consequence. Quantitative techniques including fault and event trees are covered at a working level. Safety critical equipment and the performance standards that make it verifiable follow. Maintenance strategy for equipment whose failure hurts somebody is addressed. The course closes on integrating the two registers, on shared reporting, and on the decisions where reliability and safety genuinely conflict.

What you will learn

- Assess criticality for production loss and harm potential together
- Use failure data to derive reliability measures
- Link failure modes to consequences through barrier thinking
- Apply fault and event tree techniques at a working level
- Define safety critical equipment and verifiable performance standards
- Set maintenance strategy for equipment whose failure causes harm
- Integrate the reliability and safety registers, and resolve conflicts

Who should attend

- Reliability and maintenance engineers
- Process safety specialists
- Asset integrity managers
- Risk engineers
- Technical safety consultants

Course outline

- 01 Two views of the same event
- 02 Criticality across production and harm
- 03 Failure data and reliability measures
- 04 Barriers between failure and consequence
- 05 Fault and event trees
- 06 Safety critical equipment
- 07 Performance standards and verification
- 08 Integrated registers and genuine conflicts

Upcoming dates

Dates	Venue	Format	Fee per delegate
2 to 4 November 2026	Online	Online	R6,500
11 to 13 November 2026	Pretoria, South Africa	Classroom	R14,950
2 to 4 December 2026	Dar es Salaam, Tanzania	Classroom	USD 995
16 to 18 December 2026	Lusaka, Zambia	Classroom	USD 995



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**.

AfriScience Group | +27 61 536 6531 | info@afriscience.co.za | Pretoria, Gauteng, South Africa