



## OIL, GAS AND PETROCHEMICALS TRAINING

# Digital Oilfield, SCADA and Remote Operations

5 day course

Classroom, online or in-house

## Course overview

Many fields now run with fewer people on site than there are screens in the control room, which only works when telemetry, communications and procedures were designed for remote control from the start. The automation layers are mapped first: field instruments, RTUs and PLCs, SCADA hosts, historians and the business systems above them. Communications over licensed radio, satellite and fibre follow, together with alarm management and the layout of remote operating centres. Production surveillance comes next, including well test interpretation from real time data, virtual flow metering and exception based working. Operational technology security under IEC 62443, data quality and the organisational change needed to staff a remote centre complete the programme. Engineers and supervisors come away able to specify, run and improve remote operations for producing wells and facilities.

## What you will learn

- Describe the automation layers from field instrument to enterprise system
- Specify RTU, PLC and SCADA functions for producing wells and facilities
- Select communication links for remote and offshore sites
- Apply alarm management principles to reduce operator overload
- Use real time data for well surveillance and virtual flow metering
- Design workflows for exception based remote operation
- Apply IEC 62443 controls to protect operational technology
- Plan the people and process changes behind a remote operating centre

## Who should attend

- Automation and SCADA engineers
- Production surveillance and optimisation engineers
- Control room supervisors and operators
- IT and OT security staff in oil and gas
- Operations managers planning remote or unmanned facilities

## Course outline

- 01 Automation architecture for producing assets
- 02 RTUs, PLCs and SCADA hosts
- 03 Communications for remote sites
- 04 Historians, data quality and integration
- 05 Alarm management and the control room
- 06 Real time surveillance and virtual metering
- 07 Remote operating centres and unmanned facilities
- 08 Operational technology security

## Upcoming dates



| Dates                          | Venue                  | Format    | Fee per delegate |
|--------------------------------|------------------------|-----------|------------------|
| 30 November to 4 December 2026 | Harare, Zimbabwe       | Classroom | USD 1,325        |
| 14 to 18 December 2026         | Pretoria, South Africa | Classroom | R19,950          |
| 4 to 8 January 2027            | Lusaka, Zambia         | Classroom | USD 1,325        |
| 18 to 22 January 2027          | 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](http://www.afrisciencegroup.com), email [info@afriScience.co.za](mailto:info@afriScience.co.za), or WhatsApp us on **+27 63 479 1136**.

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