



LABORATORY EXCELLENCE, SAFETY AND ACCREDITATION

Water and Wastewater Analysis

5 day course

Classroom, online or in-house

Course overview

Water results are used to declare a supply safe to drink and an effluent lawful to discharge, which makes the analysis a public health and regulatory instrument rather than a routine measurement. This course covers doing it defensibly. Delegates work through sampling and preservation, where most water results are actually decided, and the physical and chemical determinations including pH, conductivity, turbidity, hardness, nutrients and metals. Oxygen demand testing is covered in detail, since biochemical and chemical oxygen demand behave differently and are frequently misapplied. Microbiological testing for indicator organisms follows. Quality control, blanks, spikes and duplicates are treated as the evidence a result is reliable. The course closes on interpreting results against standards and reporting a non compliance.

What you will learn

- Sample and preserve water and effluent correctly
- Perform physical and chemical determinations reliably
- Apply biochemical and chemical oxygen demand tests appropriately
- Carry out microbiological testing for indicator organisms
- Run blanks, spikes and duplicates as evidence of reliability
- Interpret results against drinking water and discharge standards
- Report a non compliance and support the action that follows

Who should attend

- Water and wastewater laboratory analysts
- Municipal and utility laboratory staff
- Environmental officers and samplers
- Treatment plant operators using laboratory data
- Regulators verifying compliance results

Course outline

- 01 Results that declare water safe and effluent lawful
- 02 Sampling and preservation
- 03 Physical determinations
- 04 Chemical determinations and nutrients
- 05 Metals analysis in water
- 06 Biochemical and chemical oxygen demand
- 07 Microbiological indicator testing
- 08 Quality control, standards and reporting non compliance

Upcoming dates

Dates	Venue	Format	Fee per delegate
21 to 25 September 2026	Durban, South Africa	Classroom	R19,950
23 to 27 November 2026	Online	Online	R8,500
22 to 26 February 2027	Johannesburg, South Africa	Classroom	R19,950
1 to 5 March 2027	Kampala, Uganda	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@afiscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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