



PROCESS AND CHEMICAL ENGINEERING

Oil, Water and Gas Separation

5 day course

Classroom, online or in-house

Course overview

Separation is the first process step on any production facility and the one whose poor performance travels furthest, sending water to the oil export and oil to the produced water system. This course covers doing it properly. Delegates work through separator types and internals, the residence time and momentum principles that govern them, and level and interface control. Foaming, sand and emulsion problems are covered as the practical causes of poor separation. Produced water treatment follows, along with the discharge and reinjection specifications it must meet. The course closes on troubleshooting a separation train and on debottlenecking without new vessels.

What you will learn

- Select separator type and internals for the duty
- Apply residence time and momentum principles to separator performance
- Set up level and interface control that stays stable
- Diagnose foaming, sand and emulsion problems
- Treat produced water to discharge or reinjection specification
- Troubleshoot a separation train from downstream symptoms
- Debottleneck separation capacity without adding vessels

Who should attend

- Production and process engineers
- Field operators and production supervisors
- Facilities and design engineers
- Water treatment and environmental staff
- Graduate engineers in upstream operations

Course outline

- 01 Why separation performance travels downstream
- 02 Separator types and internals
- 03 Residence time and momentum principles
- 04 Level and interface control
- 05 Foaming, sand and emulsions
- 06 Produced water treatment
- 07 Discharge and reinjection specifications
- 08 Troubleshooting and debottlenecking

Upcoming dates

Dates	Venue	Format	Fee per delegate
14 to 18 December 2026	Pretoria, South Africa	Classroom	R19,950
11 to 15 January 2027	Online	Online	R8,500
18 to 22 January 2027	Johannesburg, South Africa	Classroom	R19,950
1 to 5 February 2027	Lagos, Nigeria	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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