



PROCESS AND CHEMICAL ENGINEERING

Crude Oil Sampling, Testing and Evaluation

5 day course

Classroom, online or in-house

Course overview

A crude assay determines what a refinery can make from a cargo and what the cargo is worth, so the sample it is run on has to represent a tank that is not uniform. This course covers the whole chain. Delegates work through sampling technique and the errors introduced before any analysis, the assay itself including distillation curve, density, sulphur, acidity and metals, and the interpretation of those results into product yields. Crude compatibility and blending are covered, since mixing incompatible crudes precipitates asphaltenes and fouls a preheat train. The course closes on valuation, on the specifications a buyer imposes, and on resolving a disputed cargo analysis.

What you will learn

- Take and handle a sample that represents a non uniform cargo
- Run and interpret the components of a crude assay
- Translate assay results into expected product yields
- Assess crude compatibility before blending
- Recognise the fouling and precipitation risks of an incompatible blend
- Value a crude against a refinery configuration
- Resolve a disputed cargo analysis

Who should attend

- Refinery process and planning engineers
- Laboratory staff running crude assays
- Crude buyers, traders and schedulers
- Terminal and cargo inspection personnel
- Technical staff in downstream operations

Course outline

- 01 Why the sample decides the answer
- 02 Sampling technique and handling
- 03 The crude assay: distillation curve and density
- 04 Sulphur, acidity, metals and contaminants
- 05 From assay to product yields
- 06 Compatibility and blending
- 07 Asphaltene precipitation and preheat fouling
- 08 Valuation and disputed analyses

Upcoming dates

Dates	Venue	Format	Fee per delegate
21 to 25 September 2026	Cape Town, South Africa	Classroom	R19,950
28 September to 2 October 2026	Dar es Salaam, Tanzania	Classroom	USD 1,325
19 to 23 October 2026	Online	Online	R8,500
11 to 15 January 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@afriScience.co.za, or WhatsApp us on **+27 63 479 1136**.

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