



OIL, GAS AND PETROCHEMICALS TRAINING

LNG Shipping and Cryogenic Handling

5 day course

Classroom, online or in-house

Course overview

Liquefied natural gas crosses oceans at about minus 162 degrees Celsius in tanks that tolerate very little error in pressure, temperature or fill level, and part of every cargo boils away during the voyage. This course follows the cargo after it leaves the liquefaction plant. It opens with LNG properties and carrier containment systems: spherical tanks, membrane designs and prismatic tanks. A voyage is then traced: gassing up, cooldown, loading at the jetty, boil off handling and reliquefaction at sea, sloshing limits and the custody transfer survey. Discharge and regasification follow, covering onshore import terminals, floating storage and regasification units, and send out control. Ship to shore links, emergency shutdown, rollover and cryogenic hazards complete the picture. Participants leave able to plan and supervise LNG cargo handling from loading arm to send out header.

What you will learn

- Explain the properties of LNG that govern its storage and handling
- Compare membrane, spherical and prismatic cargo containment systems
- Describe gassing up, cooldown, loading and discharge sequences
- Manage boil off gas through fuel use, reliquefaction and pressure control
- Calculate cargo quantity and energy from a custody transfer survey
- Explain the operation of onshore and floating regasification terminals
- Identify cryogenic, rollover and vapour cloud hazards and their controls
- Apply ship to shore links and emergency shutdown procedures

Who should attend

- LNG import terminal and regasification operators
- Marine superintendents and ship officers new to gas carriers
- Gas buyers, traders and cargo schedulers
- Port authority staff handling gas carrier calls
- Engineers planning LNG import projects

Course outline

- 01 LNG properties and cryogenic behaviour
- 02 Cargo containment systems
- 03 Gassing up, cooldown and loading
- 04 Boil off gas management at sea
- 05 Cargo measurement and custody transfer
- 06 Regasification terminals and floating units
- 07 Ship to shore interface and emergency shutdown
- 08 Cryogenic hazards, rollover and response

Upcoming dates

Dates	Venue	Format	Fee per delegate
30 November to 4 December 2026	Nairobi, Kenya	Classroom	USD 1,325
21 to 25 December 2026	Online	Online	R8,500
8 to 12 March 2027	Cape Town, South Africa	Classroom	R19,950



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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