

LNG Bunkering and Marine Fuel Operations Training Course

6 – 10 December 2026
Cape town

AGILE LEADERS
Training Center

LNG Bunkering and Marine Fuel Operations Training Course

Ref: 2003_247726 **Date:** 6 – 10 December 2026 **Location:** Cape town **Fees:** 6000 Euro

Overview

LNG Bunkering and Marine Fuel Operations Training Course is a one-week intermediate course for professionals who plan, authorize, execute, or assure liquefied natural gas fuel transfers. Participants connect an LNG bunkering operation plan, ISO 20519 bunkering controls, LNG bunkering compatibility checks, simultaneous operations risk assessment, and LNG emergency shutdown coordination. The course focuses on the fuel-transfer interface rather than LNG cargo transport or vessel design and produces an LNG Bunkering Operation and Assurance Plan. Agile Leaders Training Center presents applied marine-fuel bunkering practice.

Who Should Attend

- Marine-fuel and bunkering professionals coordinating LNG supply
- Vessel, port, terminal, and bunker-supplier operations teams
- Marine engineers and technical staff supporting gas-fuel systems
- HSE, assurance, permit, and emergency-response functions
- Commercial, measurement, contract, and claims professionals

The course assumes participants work with fuel transfers, vessels, ports, terminals, suppliers, permits, or marine risk controls. It leaves out ship design calculations, seafarer certification, LNG cargo trading, and terminal-process operations beyond the bunkering interface.

Departments and Industries

The course supports departments and industries that supply, receive, control, measure, and assure LNG as marine fuel.

- Shipowners, operators, managers, and gas-fueled vessel fleets
- LNG bunker suppliers, barges, terminals, ports, and logistics providers
- Marine engineering, operations, technical, and fuel-management departments
- HSE, assurance, emergency response, and port-control functions
- Commercial, procurement, measurement, inspection, and contract teams

Learning Objectives

By the end of this course, participants will be able to:

- Build an LNG bunkering operation and assurance plan
- Analyze vessel, supplier, fuel, equipment, and interface compatibility
- Apply permit, controlled-zone, communication, and transfer controls
- Evaluate simultaneous operations and emergency shutdown arrangements
- Use quantity measurement, delivery-note, and reconciliation evidence
- Prioritize deviations, response actions, and assurance improvements

Course Agenda

Day 1: Frame LNG Bunkering

- IGF Code Fuel-System and Bunkering Interface Map
- ISO 20519:2021 Control-Domain Checklist
- LNG Fuel Property and Release-Hazard Profile
- Bunkering Supply-Mode Selection Matrix
- Stakeholder Responsibility and Authorization Map

Day 2: Plan the Bunkering Interface

- Vessel-Supplier Compatibility Assessment
- Fuel Quantity, Quality, and Delivery-Window Plan
- Hose, Coupling, Manifold, and Transfer-Rate Review
- Controlled-Zone and Access-Control Diagram
- Permit, Notice, and Bunker Delivery Document Register

Day 3: Control Transfer Operations

- Pre-Bunkering Meeting and Checklist Sequence
- Connection, Inerting, Purging, and Leak-Test Procedure
- Communication and Emergency Shutdown Link Test
- Transfer Start-Up, Monitoring, and Topping-Off Controls
- Disconnection and Post-Transfer Completion Record

Day 4: Assure Safety and Delivery

- Simultaneous Operations Risk Assessment Matrix
- Weather, Movement, and Stop-Work Decision Table
- LNG Emergency Shutdown Coordination Plan
- Quantity Measurement and Delivery Reconciliation Sheet
- Deviation, Incident, and Corrective-Action Log

Day 5: Practice LNG Bunkering Decisions

- Suggested Exercise: Select a Bunkering Supply Mode
- Suggested Exercise: Review a Compatibility Package
- Suggested Exercise: Control a SIMOPS Conflict
- Suggested Exercise: Respond to a Transfer Deviation
- Capstone Exercise: Complete the LNG Bunkering Operation and Assurance Plan

Practical Exercises

The course uses suggested activities to convert technical, operational, commercial, and safety evidence into bunkering decisions.

- Suggested activity: compare truck-to-ship, ship-to-ship, and terminal-to-ship supply options against vessel and port constraints.
- Suggested activity: audit a compatibility package for fuel, manifold, hose, coupling, rate, communication, and shutdown evidence.
- Suggested activity: assess simultaneous passenger, cargo, maintenance, and bunkering activities with controlled zones and stop-work criteria.
- Suggested activity: reconcile delivered quantity, document a deviation, and assign corrective actions.

FAQs

Who suits LNG bunkering training, and what does it assume?

Marine-fuel, vessel, port, terminal, supplier, engineering, HSE, assurance, commercial, and measurement professionals suit the course. It assumes participants work with fuel transfers, vessels, suppliers, permits, or marine controls.

How does LNG bunkering differ from LNG cargo transportation?

LNG bunkering transfers LNG as fuel to a receiving vessel and controls fuel compatibility, connection, permits, controlled zones, SIMOPS, measurement, and emergency links. LNG cargo transportation manages a commercial cargo across the voyage and terminal chain.

What does ISO 20519 cover in LNG bunkering?

ISO 20519 covers LNG bunkering transfer-system hardware, operational procedures, bunker delivery notes, personnel training and qualifications, and requirements for facilities to meet applicable standards and local codes.

How are simultaneous operations controlled during LNG bunkering?

Simultaneous operations are controlled by identifying interacting activities, defining responsibilities and controlled zones, testing communications, checking ignition and movement hazards, setting operating limits, and agreeing stop-work criteria.

What evidence closes an LNG bunkering operation?

Closure evidence includes transfer completion records, quantity and quality data, bunker delivery documentation, disconnection checks, equipment status, deviations, incident records, corrective actions, and handover acceptance.

Conclusion

Participants take back an LNG Bunkering Operation and Assurance Plan linking compatibility, permits, supply modes, transfer steps, SIMOPS, shutdown links, measurements, and response actions. It changes separate supplier and vessel checks into a traceable fuel-transfer workflow. Teams can update the plan as vessels, supply arrangements, ports, operating limits, and evidence requirements change.