

Ship Technology and Technical Operations Training Course

29 November – 3 December 2026
Johannesburg

AGILE LEADERS
Training Center

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Ref: 2164_258468 **Date:** 29 November – 3 December 2026 **Location:** Johannesburg **Fees:** 6000 Euro

Overview

Ship Technology and Technical Operations Training Course is a one-week professional course for marine engineers, naval architecture teams, ship operators, technical superintendents and asset managers, who leave with a Ship Technology and Technical Operations File. The course connects vessel types and hull structure, ship stability fundamentals, marine propulsion and auxiliary systems, ship technical drawings, classification interfaces, vessel condition monitoring and operating decisions. Agile Leaders Training Center presents ship technology practice.

Who Should Attend

- Engineering teams responsible for ship systems and technical condition
- Naval architecture teams responsible for hull, arrangement and stability information
- Operations teams responsible for reliable vessel performance
- Technical management teams responsible for condition and intervention decisions
- Survey-support teams responsible for records and evidence preparation
- Asset teams responsible for lifecycle and technical-risk priorities

The course assumes participants work with ships, technical records or marine operations; it leaves out detailed ship design, maintenance execution, formal survey authority and certification.

Departments and Industries

The course supports technical decisions across shipping, offshore services and marine asset management.

- Shipowner and operator technical departments
- Marine engineering and naval architecture services
- Ship management and technical superintendent teams
- Shipyards, repair facilities and equipment suppliers
- Offshore support and maritime asset operations

Learning Objectives

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

- Analyze vessel type, form and operating profile.
- Apply hull and stability information to technical decisions.
- Compare propulsion and auxiliary-system arrangements.
- Use drawings and system schematics.
- Evaluate class, statutory and condition evidence.
- Build a technical operations file.

Course Agenda

Day 1: Profile the Vessel

- Vessel Type and Operating Profile Matrix
- Principal Dimensions and Hull-Form Reference Sheet
- General Arrangement Drawing Review Method
- Ship Compartment and Watertight Boundary Map
- Technical Particulars and Capacity Data Register

Day 2: Evaluate Structure and Stability

- Hull Girder and Structural Member Identification Guide
- Load Path, Stress and Structural Condition Map
- Intact Stability GM and GZ Concept Sheet
- Free-Surface, Trim and Draft Decision Table
- Damage-Control Plan and Watertight Integrity Checklist

Day 3: Map Machinery and Systems

- Main Propulsion Energy-Flow Diagram
- Steering Gear and Power-Transmission Interface Map
- Fuel, Lubrication and Cooling System Schematic
- Bilge, Ballast and Fire-Main System Matrix
- Electrical Generation and Essential-Services Distribution Map

Day 4: Control Technical Operations

- Classification and Statutory Interface Register
- Technical Drawing and Equipment Manual Index
- Machinery Trend and Condition-Monitoring Dashboard
- Defect, Risk and Operating-Restriction Decision Log
- Technical Handover and Intervention Priority Plan

Day 5: Practice Ship Technology

- Exercise: Interpret Vessel Form and Arrangement Drawings
- Exercise: Evaluate Hull and Stability Information
- Exercise: Trace Machinery and Auxiliary-System Interfaces
- Exercise: Assess Condition Evidence and Operating Restrictions
- Capstone Exercise: Complete the Ship Technology and Technical Operations File

Practical Exercises

The course uses suggested activities based on cargo, passenger and offshore-support vessel cases.

- Suggested activity: classify a vessel and assemble its technical profile from drawings and particulars.
- Suggested activity: trace a stability or watertight-integrity concern to operating controls.
- Suggested activity: map propulsion, auxiliary and electrical dependencies from system schematics.
- Suggested activity: prepare a condition-based intervention and handover decision.

FAQs

Who suits ship technology training, and what does it assume?

Ship technology training suits engineering, naval architecture, operations, technical management, survey-support and asset teams. It assumes experience with ships or technical records and does not confer survey authority.

How does ship technology training differ from marine engineering maintenance training?

Ship technology training connects vessel form, structure, stability, machinery, systems and technical decisions. Maintenance training focuses on task execution, troubleshooting and repair procedures for specific equipment.

How do hull form and stability affect ship technical operations?

Hull form and stability information influence loading, draft, trim, watertight integrity, operating limits and the interpretation of vessel condition during service.

What ship systems belong in a technical operations review?

A technical operations review includes propulsion, steering, fuel, lubrication, cooling, bilge, ballast, fire-main, electrical generation and essential-service distribution interfaces.

What evidence supports vessel condition decisions?

Vessel condition decisions use drawings, equipment records, trend data, defect reports, class and statutory status, operating restrictions and documented intervention priorities.

Conclusion

Participants take back a Ship Technology and Technical Operations File linking vessel profile, structure, stability, machinery, systems, condition and operating controls. The file improves technical traceability from drawings and evidence to intervention priorities. It also supports coordination among engineering, operations, technical management, survey support and asset teams.