



Oil & Gas Marine Terminals Operations & Management Course



Oil & Gas Marine Terminals Operations & Management Course

Introduction

In this enlightening marine oil and gas terminal operations management course, participants hailing from organizations operating marine terminals are equipped with crucial knowledge and innovative tools and techniques essential for adeptly addressing a range of technical and safety challenges that arise during terminal operations. These operations encompass cargo transfer support, including custody transfer, emergency response, and vessel berthing support, all in accordance with international standards.

The marine oil and gas terminal operations management course content has been meticulously curated to offer a comprehensive look into the managerial and technical elements vital for the seamless functioning of these intricate oil and gas facilities, thereby laying a solid foundation in oil and gas operations management.

Marine Terminal Management System in Oil and Gas

With the dynamic evolution of the oil and gas sector, a specialized focus on the marine terminal management system has become indispensable. This marine oil and gas terminal operations management course delves into the intricate details and operational frameworks that govern the management systems within the oil and gas terminals.

Participants in the marine oil and gas terminal operations management course will gain proficiency in the principles of terminal operator training and certification, securing knowledge in both terminal operations management and the role of a terminal operations manager. Subsequent skill development in these areas will prepare the attendee to handle the multifaceted dimensions of terminal operations within the marine oil and gas industry effectively.

Targeted Groups

- Marine Terminal Facility Managers and Coordinators.
- Terminal Superintendents, Supervisors, and Engineers.
- Safety and Environmental Managers, Engineers, and Officers.
- Spill Management Team Members.
- Transfer Supervisors.
- Marine Shipping Coordinators.
- Dock Maintenance Planners.

Course Objectives

Upon completion of this marine oil and gas terminal operations management course, the attendees will be able to:

- Acquire extensive insights into the operations and management of oil and gas marine terminals.
- Understand the international regulations and requirements specific to oil and gas marine terminals.
- Implement strategic planning methodologies for efficient storage and transfer systems, mastering the diverse planning and transfer requirements for an oil and gas marine terminal.
- Explore the various vessel operations unique to oil and gas marine terminal environments, including oil tankers crude and product and gas carriers LNG/LPG.
- Develop proficient terminal management skills and apply an array of terminal support operations, ranging from berthing support to cargo transfer, emergency response, and vessel departure procedures.
- Adopt proven safety practices and protocols during diverse operations at oil and gas terminals and oversee oil spill contingency and emergency response initiatives.
- Utilize advanced qualitative and quantitative risk assessment techniques relevant to oil and gas marine terminal activities.

Targeted Competencies

At the end of this marine oil and gas terminal operations management course, the participants will be able to:

- Understand hydrocarbon properties and handling techniques.
- Learn about familiarity with relevant regulations and requirements.
- Proficiency in terminal planning.
- Expertise in vessel operations.
- Master of terminal management and operations.
- Overview of in-depth knowledge of security, safety, and other essential aspects related to the export and import of oil and gas.

Course Content

Unit 1: Cargo Properties

- Dangerous cargo.
- Toxicity.
- Confined spaces.
- Breathable atmospheres.
- Hydrocarbon properties.
- Crude oil.
- Liquified Petroleum Gas LPG.
- Liquified Natural Gas LNG.
- UEL and LEL.
- BLEVE.
- Pancake cloud explosions.
- Fires and explosions.

Unit 2: Storage and Transfer

- Storage tanks.
- Atmospheric aboveground storage tanks.
- Learn about floating roofs, fixed roofs, variable vapor spaces, and pressurized tanks.
- Understand tank inspections and cleaning.
- Transfer systems.
- Centrifugal pump design and operation.
- Piping systems.
- Flow and pressure matching.
- Marine loading arms.
- Lightering.
- Understand the ship/shore safety checklist.
- Ship-shore transfers.

Unit 3: Harbour and Vessels

- Jetties, quays, wharves, and SBMs.
- Harbor design and construction.
- Understand sizing and tidal effects.
- Overview of depth constraints and dredging operations.
- SBM design and construction.
- Hoses.
- Cargo compatibility.
- Marking and testing.
- Storage and maintenance.
- Understand the disposal of tank washings, slops, and dirty ballast.
- Bunkering.
- Learn about communications and emergency response plans.
- Shipboard management.

Unit 4: Safety and Risk

- Ignition sources.
- Electrostatic charge.
- Hazardous zone classification.
- Intrinsically safe equipment.
- Firefighting and protection.
- Fire detection systems.
- Firefighting systems.
- Shipboard firefighting systems.
- Risk assessments.
- Risk management.
- Understand qualitative and quantitative risk assessment techniques.
- Risk.

Unit 5: Terminal Management

- Storage and transfer planning.
- Berthing support.
- Cargo transfer support.
- Emergency response.
- Vessel departure support.
- Security and vessel access.
- Understand international regulations and requirements for oil and gas marine terminals.