



Liquefied Natural Gas (LNG) Training

Training plays a key role in developing and maintaining the competency, economic viability, and growth of the LNG industry.

Whether you're an LNG plant operator or supervisor, engineer, project manager, executive, regulator, attorney—or planning to enter the LNG industry—one or more of GTI's training programs can meet your training needs.



"Great content and knowledgeable speakers."

*Noma Ogbeifun
Chevron Energy
Technology Company*

Classroom Courses

GTI's LNG training programs comprise courses that focus on the many factors involved in importing and exporting LNG and its carriage as a cargo. GTI is a leader in the development of courses on LNG as a marine fuel, specifically pertaining to bunkering (refueling) facilities for gas-powered ships, tugs, and LNG barges.

All courses can be customized and delivered to your classroom.
Or sign up for one or more of our scheduled courses.

Fundamentals of Baseload LNG: Markets, Technology, Economics

Learn what's new in markets, pricing, contracts, supply sources, liquefaction and regasification technologies, and more. Explore the design and construction of LNG terminals and liquefaction plants, LNG storage, offshore LNG, and interchangeability. Get answers to these and other questions: What's the status of existing and proposed receiving terminals? Are offshore facilities a viable alternative to land-based plants? Hear an expert perspective on commercial and technical issues related to LNG shipping, including project economics and financing.

Understanding LNG Terminals and Terminal Operations: A Critical Link in the LNG Chain

Understand terminal operations in the context of the global LNG industry. Begin with an overview of the industry and examine the basics—thermodynamics, flashing, boil-off. Find out what's involved in transforming a terminal concept into a plan and the parameters for designing and building an LNG terminal. Explore LNG storage, safety and security, and quality assurance and inspection, LNG shipping, and LNG trucking.

Introduction to LNG as a Marine Fuel

Learn the basics of using low-flashpoint fuels like LNG in marine propulsion. Understand the bunkering process for LNG vessels and explore the current and planned infrastructure, the properties of LNG as a marine fuel, responding to a release, and the types of bunkering technologies and their operations. Find out about current rules and regulations, LNG fuel transfer operations, fire prevention, and emergency operations.

Small Scale LNG

This two-day course provides an introduction to small scale LNG design and operation, including information on the sources and nature of LNG supply, elements in the LNG chain that relate operations such as peak shaving, key differences between small scale and larger scale shipping, and small scale LNG market segments.

Onsite Classroom Courses

Contact us to schedule these courses in your own classroom, led by your instructors or ours.

LNG Bunkering Person in Charge (PIC)

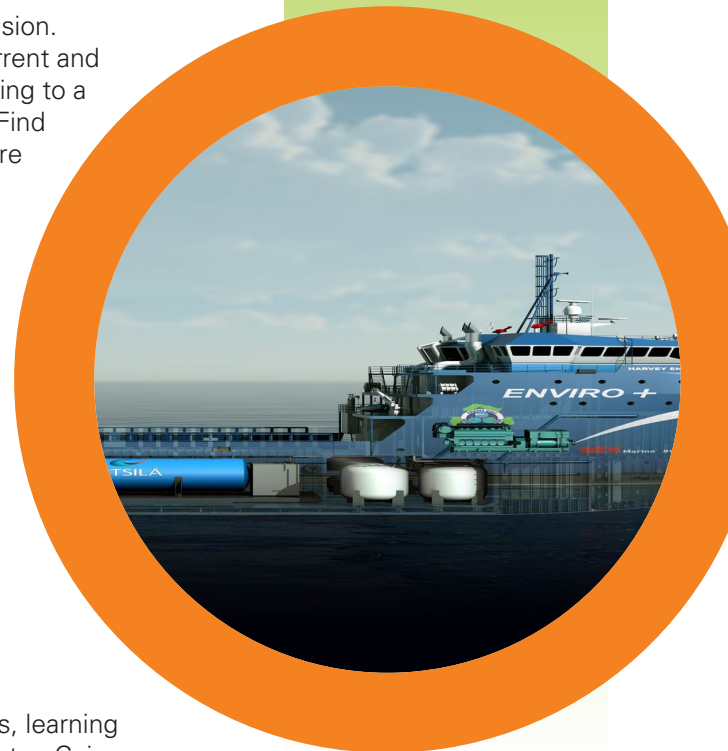
Achieve a level of safety and regulatory compliance using the guidelines, learning objectives, and methodology currently used in the maritime training sector. Gain an understanding of safe operation for bunkering of LNG when carried as a fuel. Learn about the propulsion system; LNG safety, fire, and pollution prevention measures; and PIC responsibilities and training and simulation and assessments.

"I've really enjoyed the class. The expertise that the instructors have made the material very interesting..."

*Eric Brieden
Freeport LNG*

"A great course to refresh your memory of thermodynamics, and specific to the LNG industry."

*Victor Armstrong
Teekay Shipping Ltd.*



Understanding LNG Peakshaving Plants and Operations

Learn the basic elements of planning, designing, and operating an LNG peakshaving plant. Among the topics covered are safety issues, including a review of new Department of Transportation (DOT) regulations on reporting incidents, and teambuilding and troubleshooting exercises. Learn how industry changes—peaking requirements and supply, gas quality, security issues—affect peakshaving plant operations.

Thermodynamics for LNG Plant Operators and Engineers

Learn to manage your plant safely and efficiently with a solid understanding of thermodynamics. Find out how to analyze a simplified open-cycle expansion liquefaction plant, using the pure substance, methane. Learn to use both graphical data and software-aided computation for determining gas properties. The software program computes gas properties for pure substances and mixtures—for example, enthalpy, entropy, and density of both gases and liquids.

Online Learning

Courses are self-paced and ideal for individuals or groups, with volume discounts.

LNG Plant Operator Training

Learn what every LNG plant employee should know about LNG and plant production from a clear explanation of LNG to gasification, liquefaction, equipment, security, safety, and trucking. Understand potential hazards and steps to prevent or alleviate them. This course qualifies as the periodic training required by U.S. Department of Transportation regulations. Companies outside the U.S. also use the course to train their personnel to ensure safe, effective operations.

LNG Shipping and Cargo Handling

Understand what's involved in loading, docking, and unloading a ship carrying LNG, with an emphasis on safety, regulatory compliance, and security. Learn the difference between an import terminal and an export terminal, and discover the step-by-step process for cargo loading and unloading. Identify an LNG ship's staffing requirements, operations at sea, and maritime codes that apply to shipping and cargo handling procedures.

LNG Plant Safety

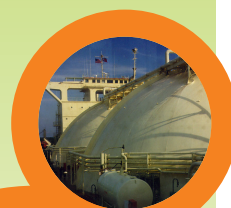
Build or reinforce your awareness of the potential hazards in an LNG plant and learn how to ensure an emergency won't occur. Recognize the different levels of emergencies and the steps to take to handle them. Explore multiple solutions to realistic scenarios and find out what really works. Go through a typical day in the life of an LNG technician. The course is narrated by LNG expert and instructor Dr. Steve Vitale.

How an LNG Plant Operates: Import, Storage, and Vaporization

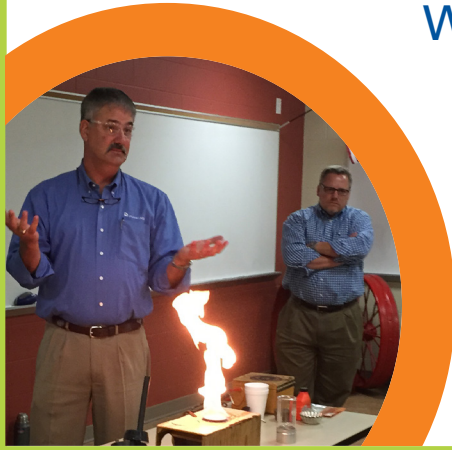
Learn how an import terminal operates and help the LNG industry attain plant safety, reliability, and profitability. See a basic plant concept layout, with tanks, recondensers, vaporizers, pumps, and other equipment and learn the purpose of each component. Understand the desuperheating process—pump curves, compression, vaporizers, and more. The course is narrated by LNG expert and instructor Dr. Steve Vitale.

"[LNG Plant Operator Training] was a very informative course and I enjoyed taking it. I learned a great deal."

*Ricky Wilson
SCE&G*



Your journey begins at gastechnology.org/training



Why choose GTI as your LNG training provider?

A pioneer in LNG education, GTI has offered LNG training since the industry's inception. Teaching trainees to perform procedures is important, but insufficient. Our goal is to train them to think creatively and productively about technical issues and understand how abnormal situations develop and why procedures require specific actions.

GTI is also a founding and continuing sponsor of the triennial Conference and Exhibition on Liquefied Natural Gas, hosting the first conference in 1968. GTI is the coordinator of the conference papers and posters and has strong relationships with industry leaders.

Expertise your company can trust

Don't take our word for it. Read what our customers have to say about our training programs.

"When TOTE Maritime Puerto Rico recognized a need to train the terminal personnel, we turned to GTI. We knew of GTI's highly regarded training expertise from the LNG class they developed for local first responders here in Jacksonville. GTI was able to provide us with a quality LNG awareness class tailored to fit our unique fueling operation for the new Marlin Class Container ships. These classes conducted by GTI instructors have given the longshoremens and TOTE employees the basic knowledge needed to maintain a safe and efficient operation. TOTE will continue this awareness program through computer based training GTI has developed for our operation."

Lee Peterson
Director, Fleet Safety
TOTE Services

Custom Online Training for Your Facility and Procedures

Let GTI design and develop an online or classroom course— or a blend of both— that incorporates the equipment and procedures specific to your plant. We can adapt existing modules or create new ones, according to your needs.

Let us help you select a training program that reflects your personal career goals or your employee and facility needs. Explore the possibilities.
Contact us at education@gastechnology.org.

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