

LIQUID CARGO TRAINING COURSES



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BASIC LIQUIFIED GAS TANKER OPERATIONS (STCW)



Target audience:	This course is aimed at Officers and Ratings assigned to specific duties and responsibilities related to cargo or cargo equipment on a Liquefied Natural Gas Tanker and is a mandatory requirement under STCW Regulation V/1-2.
Course content:	<ul style="list-style-type: none"> • Identify types of gas carriers and their general arrangement • Understand properties and characteristics of gases • Identify piping systems and cargo handling equipment • Apply care of cargo when loading, unloading or during transit • Carry out tank cleaning, purging, gas freeing and inerting • Understand and prevent hazards including electrostatic charge and use of the emergency shutdown system (ESD) • Respond to emergencies
Entry standards:	Serving Officer or Rating on a Liquefied Gas Tanker, some Maritime Administrations may specify an additional requirement to have served or serve at least three months of approved sea going service on a Liquefied Gas Tanker.
Facilities:	Classroom, Videos, Gas Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (ME-GI, DFDE and Steam Turbine models)
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises
Guidelines:	STCW Table A-V/1-2-1, The ISM Code, IMO Model Course 1.04
Course duration:	5 days
Assessment:	Knowledge and Practical assessments
Certification:	Attendance certificate upon successful completion of assessments
Venue:	Maritime Training Centre Cyprus

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ADVANCED LIQUIFIED GAS TANKER OPERATIONS (STCW)



Target audience:	This course is aimed at Senior Officers (Deck and Engineering) and personnel with immediate responsibility for the loading, discharging, care in transit, handling of cargo, tank cleaning and cargo related operations. The course is a mandatory requirement under STCW Regulation V/1-2.
Course content:	<ul style="list-style-type: none"> • Gas Tanker design, systems and equipment • Managing loading and discharging operations including inerting and use of nitrogen • Understanding cargo pumps and pumping arrangements • Handling cargo in transit • Identification of cargo tank level gauging systems • Monitoring of tank pressure, control systems and maintaining the correct temperatures • Carrying out inspection of structures and void spaces
Entry standards:	Hold an STCW Basic Liquified Gas Tanker Cargo Operations certificate and completed a minimum of three months approved seagoing service on liquefied gas tankers or completed at least one month of approved onboard training on liquefied gas tankers plus carried out the required number of cargo operations.
Facilities:	Classroom, Videos, Gas Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (ME-GI, DFDE and Steam Turbine models)
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises
Guidelines:	STCW Table A-V/1-2-2, The ISM Code, IMO Model Course 1.05
Course duration:	5 days
Assessment:	Knowledge and Practical assessments
Certification:	Attendance certificate upon successful completion of assessments
Venue:	Maritime Training Centre Cyprus

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LIQUIFIED CARGO OPERATIONS (LICOS) LNG



Target audience:	This course is aimed at operational level Deck and Engine Officers due to join an LNG tanker.
Course content:	<p>Practical exercises structured around the procedures and operation of the cargo and ballast installation of an LNG tanker.</p> <ul style="list-style-type: none"> • Make a safer and more effective contribution to the operation and control of the cargo and ballast installation of a LNG tanker. • Improve ship safety and provide greater protection of the environment.
Entry standards:	STCW Basic Gas Tanker Certification. Participants are recommended to hold an Advanced Gas Tanker certificate.
Facilities:	Classroom, Videos, Gas Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (ME-GI, DFDE and Steam Turbine models)
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises
Guidelines:	IMO Model course 1.36, SIGTTO LNG Shipping – Suggested competency standards
Course duration:	3 days
Assessment:	Knowledge and practical assessments
Certification:	Attendance certificate on successful completion of assessments
Venue:	Maritime Training Centre Cyprus, Maritime Training Centre India and Maritime Training Centre Poland

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LIQUIFIED CARGO OPERATIONS (LICOS) LPG



Target audience:	This course is aimed at Officers (Deck and Engineering) due to join an LPG tanker.	
Course content:	<p>Familiarisation</p> <ul style="list-style-type: none"> • Ship type simulation • Tank arrangement of the simulated liquefied petroleum gas tanker • Cargo containment system • Pipeline arrangement • Pipe system control valves • Pumps, compressors and reliquefaction plant • Instrumentation and auxiliary system • Controls • Basic operations and procedures <p>Ballast Operations</p> <ul style="list-style-type: none"> • General provisions • Ballasting • Deballasting 	<p>Special Operations and Procedures</p> <ul style="list-style-type: none"> • Tank atmosphere evaluation • Cargo ventilation system • Reliquefaction system and control of boil-off • Procedure for changing cargo and tank cleaning • Use of inert gas • Draining and stripping procedures • Gas freeing <p>Cargo Operations</p> <ul style="list-style-type: none"> • General cargo handling provisions • Cargo measurement and calculation • Cargo condition maintenance on passage and in port • Procedure for preparation for loading cargo • Procedure for preparation for unloading cargo
Entry standards:	The candidates are expected to have undertaken specialised gas tanker training course.	
Facilities:	Classroom, Videos, Gas Simulator – L3 Liquid Cargo Handling Simulator (Liquefied Petroleum Gas Carrier - Fully Refrigerated model).	
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises	
Guidelines:	IMO Model Course 1.35 LPG Tanker Cargo & Ballast Handling Simulator 2007 Ed	
Course duration:	3 days	
Assessment:	Knowledge and practical assessments	
Certification:	Attendance certificate on successful completion of assessments	
Venue:	Maritime Training Centre Cyprus and Maritime Training Centre Poland	

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LNG TANKER OPERATIONS MANAGEMENT LEVEL SIGTTO (LICOS)



Target audience:	This course is aimed at qualified Gas Engineers, operational level Deck and Engine Officers prior to promotion to management level and for all Officers and personnel on board LNG carriers, specifically aimed at those who will be responsible for the safe planning and execution of operations related to the cargo.
Course content:	<ul style="list-style-type: none"> • Simulator-based exercise of dry dock to dry dock voyage cycle • Practical application and management of full range of cargo operations • Construction and operation of cargo containing systems and cargo handling equipment • Utilisation of safety and protective systems and equipment • Application of international and industry regulations and guidelines • Identifying and dealing with emergencies <p>This course follows the syllabus set out by SIGTTO LNG competence standard (second edition 2008) at Management level. The course is approved by DNV as meeting the requirements of the industry recognised SIGTTO LNG competence standard.</p>
Entry standards:	Three months sea service on a gas tanker and hold a STCW Advanced Gas Tanker certification.
Facilities:	Classroom, Videos, Gas Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (ME-GI, DFDE and Steam Turbine models)
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises
Guidelines:	IMO Model course 1.36, SIGTTO LNG Shipping – Suggested Competency Standards
Course duration:	5 days
Assessment:	Knowledge and practical assessments
Certification:	Attendance certificate upon successful completion of assessments
Venue:	Maritime Training Centre Cyprus, Maritime Training Centre Poland and Maritime Training Centre India

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BSM BASIC LNG CARGO OPERATIONS



Target audience:	The course is aimed at Junior Officers due to join an LNG tanker and focuses on practical exercises structured around the procedures and operation of the cargo and ballast systems.
Course content:	<p>The course covers the knowledge, understanding and proficiency required to allow safer and more effective contribution to the operation and control of the cargo and ballast installation of an LNG tanker. It is in line with recognised industry requirements and procedures, including how to:</p> <ul style="list-style-type: none"> • Safely carry out cargo and ballast operations • Apply BSM's Safety Management System, where appropriate
Entry standards:	Junior Officers and Ratings hold a Basic Liquified Gas Tanker Operations certificate
Facilities:	Classroom, Videos, Gas Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (ME-GI, DFDE and Steam Turbine models)
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises
Guidelines:	IMO Model Course 1.36, The ISM Code
Course duration:	5 days
Assessment:	Knowledge and Practical assessment
Certification:	Attendance certificate upon successful completion of assessments
Venue:	<p>Maritime Training Centre Cyprus and Maritime Training Centre Poland</p> <p>This course can be delivered as a client specific course and would be made bespoke according to individual company processes and procedures or delivered as a generic course using BSM procedures as example of best practice.</p>

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BSM MANAGEMENT OF LNG CARGO OPERATIONS



Target audience:	This course is aimed at Gas Engineers and Junior Officers prior to promotion to Senior Officer.
Course content:	<p>The course focuses on practical exercises structured around planning, execution and monitoring of cargo handling operations on an LNG tanker. This includes:</p> <ul style="list-style-type: none"> • Safely carry out cargo operations • Manage cargo handling operations • Manage shipboard teams • Apply mandatory regulations and industry standards
Entry standards:	Holder of STCW Advanced Gas Tanker certificate and six months sea service on an LNG tanker.
Facilities:	Classroom, Videos, Gas Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (ME-GI, DFDE and Steam Turbine models)
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises
Guidelines:	The ISM Code
Course duration:	3 days
Assessment:	Knowledge and Practical assessments
Certification:	Attendance certificate upon successful completion of assessments
Venue:	Maritime Training Centre Cyprus and Maritime Training Centre Poland
	This course can be delivered as a client specific course and would be made bespoke according to individual company processes and procedures or delivered as a generic course using BSM procedures as example of best practice.

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BSM MANAGEMENT OF NON-STANDARD LNG CARGO OPERATIONS



Target audience:	This course is aimed at Senior Officers and Cargo Officers and focuses on practical aspects of non-standard cargo operations governing LNG ship operations from dry dock to dry dock.
Course content:	<p>Covers the competency, safety and knowledge requirements covered in the SIGTTO standards for LNG ships. The course is conducted using an LNG software simulation package and presentations covering procedures, regulations and principles of LNG ship operations. This includes:</p> <ul style="list-style-type: none"> • Detection, identification and response to non-standard occurrences, failures or breakdowns related to cargo handling operations • Hazards of cargo equipment failures • Emergency procedures • Safety measures and failure prevention • Handling of cargo critical equipment • Implementation of the Safety Management System requirements
Entry standards:	Holder of STCW Advanced Gas Tanker certificate and 12 months sea service on an LNG tanker.
Facilities:	Classroom, Videos, Gas Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (ME-GI, DFDE and Steam Turbine models)
Teaching methods:	Classroom lecture, videos, various examples, simulated cargo exercises
Guidelines:	The ISM Code
Course duration:	3 days
Assessment:	Knowledge and practical assessments
Certification:	Attendance certificate uppo successful completion of assessments.
Venue:	<p>Maritime Training Centre Cyprus</p> <p>This course can be delivered as a client specific course and would be made bespoke according to individual company processes and procedures or delivered as a generic course using BSM procedures as example of best practice.</p>

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BASIC TRAINING FOR SERVICE ON SHIPS SUBJECT TO THE IGF CODE (STCW)



Target audience:	This course is aimed at all seafarers with designated safety responsibilities and duties associated with the care and responding to emergencies in relation to LNG and other low flashpoint fuels onboard ships subject to the IGF Code. This course is mandatory for all seafarers with designated safety duties associated with the care and use of fuel and fuel systems on vessels associated with the IGF Code.
Course content:	<ul style="list-style-type: none"> • Contribute to the safe operation of a ship subject to the IGF Code • Take precautions to prevent hazards on a ship subject to the IGF Code • Apply occupational health and safety precautions and measures • Respond to emergencies • Take precautions to prevent pollution of the environment from the release of fuels found on ships subject to the IGF Code
Entry standards:	All relevant crew on vessels covered by the IGF Code as above. Completion of a Tanker Fire Fighting Course (as per administration issuing certification). No prior special sea service is required. Seafarers already holding the Basic Gas Tanker Operations certificate are exempted attending this course.
Facilities:	Classroom, Videos, Gas Bunkering Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (Pressurized Type-C and Membrane models)
Teaching methods:	Classroom lecture, videos, various examples, simulated bunkering exercises
Guidelines:	STCW Table A-V/3-1. Information published by the Society for Gas as a Marine Fuel (SGMF)
Course duration:	2 days
Assessment:	Knowledge and practical assessments
Certification:	Attendance certificate leading to STCW certification
Venue:	Maritime Training Centre Cyprus

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ADVANCED TRAINING FOR SERVICE ON SHIPS SUBJECT TO THE IGF CODE (STCW)



Target audience:	This course is aimed at Masters, Engineering Officers and any personnel who have an immediate responsibility for making decisions with respect to the handling of fuels subject to the IGF Code, and for the care and use of fuel and fuel systems on vessels associated with the IGF Code. This course complies with the UK Merchant Navy Training Board (MNTB) requirements and SGMF guidance.
Course content:	<ul style="list-style-type: none"> • Understand the care of, storage and handling of LNG as a fuel • Understand the effects of cryogenic substances on the vessel and equipment • Safe operation when handling, transferring or bunkering LNG • Identify the Custody Transfer document • Interaction with bunker vessels or trucks • Identify the process of bunkering LNG and the Person In Charge (PIC or POAC) • Deal with various emergencies • Protect and prevent hazards • Environmental aspects of LNG
Entry standards:	Completion of a Basic IGF Code course under STCW. Minimum of one month approved sea service on vessels subject to the IGF Code and minimum of three bunkering operations of fuels covered by the IGF Code, two of which may be replaced by approved simulator training on bunkering operations.
Facilities:	Classroom, Videos, Gas Bunkering Simulator – G-Sim DNV approved Class A Liquid Cargo Handling Simulator (Pressurized Type-C and Membrane models)
Teaching methods:	Classroom lecture, videos, various examples, simulated bunkering exercises
Guidelines:	STCW Regulation V/3.8 and Table A-V/3-2. Society for Gas as a Marine Fuel (SGMF)
Course duration:	5 days
Assessment:	Knowledge and practical assessments
Certification:	Attendance certificate leading to STCW certification.
Venue:	Maritime Training Centre Cyprus

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