



MODULAR COURSES

PROGRAMME HANDBOOK

2021 EDITION

AKADEMI LAUT MALAYSIA MODULAR COURSES & SIMULATION TRAINING DEPARTMENT

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PROGRAMMES OFFERED BY

MODULAR COURSES DEPARTMENT

A Safety & Operations Courses



A1 Basic Training



Code: MBT



6 days



Course Scope

Seafarers employed or engaged in any capacity on board ship on the business of that ship as part of the ship's complement with designated safety or pollution-prevention duties in the operation of the ship shall, before being assigned to any shipboard duties;

1. receive appropriate approved training or instruction in:
 - personal survival techniques as set out in table A-VI/1-1,
 - fire prevention and firefighting as set out in table A-VI/1-2.
 - elementary first aid as set out in table A-VI/1-3, and
 - personal safety and social responsibility as set out in table A-VI/1-4;
2. be required to provide evidence of having achieved the required standard of competence to undertake the tasks, duties and responsibilities listed in column 1 of tables A-VI/1-1, A-VI/1-2, A-VI/1-3 and A-VI/1-4 through:
 - demonstration of competencies, in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of those tables, and
 - examination or continuous assessment as part of an approved training programme in the subject listed in column 2 of those tables.



Entry Requirements

Seafarers must possess a valid seaman identification card and valid medical certificate issued by an approved medical practitioner.



Course Outline

1. Elementary First Aid
 - Body structure and functions
 - Positioning of casualty
 - The unconscious casualty
 - Resuscitation
 - Bleeding
 - Management of shock
 - Burns, scalds and accidents caused by electricity
 - Rescue and transport of casualty
2. Fire Prevention and Fire Fighting
 - › Competence 1: Minimize the risk of fire
 - Concept and application of the fire triangle to fire and explosion
 - Types and sources of ignition
 - Flammable materials commonly found on board
 - Need for constant vigilance
 - Fire hazards
 - › Competence 2: Maintain a state of readiness to respond to emergency situations involving fire
 - Organization of shipboard fire fighting
 - Location of fire-fighting appliances and escape routes
 - Fire spreads in different parts of the ship
 - Fire and smoke detection measures on ships and automatic alarm systems
 - › Competence 3: Fight and extinguish fires
 - Selection of fire-fighting appliances and equipment
 - Use of breathing apparatus for fighting fires
3. Personal Safety and Social Responsibilities
 - Introduction
 - Comply with emergency procedures
 - Take precautions to prevent pollution of the marine environment
 - Observe safe working practice
 - Contribute to effective communications on board ship
 - Contribute to effective human relationships on board ship
 - Understand and take necessary action to control fatigue
 - Review and assessment
4. Proficiency in Personal Survival Techniques
 - Emergency situations
 - Evacuation
 - Survival craft and rescue boats
 - Personal life saving appliances
 - Personal life saving appliances (Demonstrations)
 - Survival at sea
 - Emergency radio equipment



Assessment Methods

1. There will be no formal written examination, but there will be a practical assessment by the lecturers/instructors whose passing grade is 50%.
2. Full attendance of the course is required for awarding of the certificate.

A2 Basic Training for Oil & Chemical Tanker Cargo Operations



Code: MBLGT



5 days



Course Scope

1. This course provides training to candidates to be duly qualified under Section A – V/1-1 of the STCW code with specific duties for loading, unloading and care in transit or handling of oil and chemical cargoes.
2. It comprises a basic training programme appropriate to their duties, including basic training for oil and chemical tanker safety, fire safety measures, pollution prevention, operational practice and obligations under applicable law and regulations.
3. The course covers the competence requirements as given in the table under Section A-V/1-1-1 of the STCW Code adopted by the International Convention on Standards of Training, Certification and Watch keeping for Seafarers, 1978 as amended in 2010.
4. During the course, there will be:
 - Familiarization with the equipment, instrumentation and controls used for cargo handling on a tanker
 - A greater awareness of the need of proper planning, the use of checklists and the time scales involved in the various cargo handling operations
 - An enhanced awareness to apply proper and safe procedures at all times when carrying out the various operations on board an oil or chemical tanker
 - An acquisition of experience in identifying operational problems and assist in solving them.
 - An improvement in the ability to promote safety and protect the marine environment
 - An increased ability to assist and co-ordinate actions during emergencies



Entry Requirements

1. This course is open to seafarers who have qualified in accordance with regulation Section AVI/ 1 of the International Convention on Standards of Training, Certification and Watch keeping for Seafarers 1978, as amended including the Manila amendments 2010 approved by the Administration.
2. The seafarers should possess seaman identification card and a valid seafarer medical certificate issued by an approved medical practitioner. To be qualified and certificated as per Section AVI/ 1, Para 2 of the International Convention on Standards of Training, Certification and Watch keeping for Seafarers 1978, as amended including the Manila amendments 2010 approved by the Administration.
3. Knowledge and understanding of tanker safety culture and safety management Rules and regulations
4. Basic hazards associated with tanker operations and hazard controls
 - › Hazards
 - Health hazards
 - Environmental hazards
 - Reactivity hazards
 - Corrosion hazards
 - Explosion and Flammability hazards
 - Sources of ignition, Including electrostatic Hazards
 - Toxicity hazards
 - Vapour leaks and clouds
 - › Basic knowledge of hazard controls
 - Inerting, water padding, drying agents and monitoring techniques
 - Anti-static measures
 - Ventilation
 - Cargo segregation
 - Cargo inhibition
 - Importance of cargo Compatibility
 - Atmospheric control
 - Gas Testing
 - Understanding of Information on a Material Safety Data Sheet (MSDS)



Course Outline

1. Basic knowledge of tankers
 - Types of oil tankers
 - Types of Chemical tankers
 - Basic knowledge of ship arrangements of an oil tanker and chemical tanker
 - Pumps
 - Cargo Heating
 - Inert Gas system
 - Cargo measurement systems
2. Basic knowledge physical properties of oil and chemicals
 - Basic physics
 - Basic chemistry, chemical elements and groups
 - Physical properties of oil and chemicals carried in bulk
5. Occupational health and safety precautions
 - › Function and proper use of gas-measuring instruments
 - › Proper use of safety equipment and protective devices including:
 - Breathing apparatus and tank-evacuating equipment
 - Protective clothing and equipment
 - Resuscitators
 - Rescue and escape equipment
 - › Basic knowledge of safe working practices and procedures in accordance with legislation and industry guidelines relevant to oil and chemical tankers

- Precautions to be taken when entering enclosed spaces
 - Precautions to be taken before and during “repair and maintenance” work in a gas dangerous area
 - Safety measures for hot and cold work
 - Electrical safety precautions
 - Ship/shore safety checklist
 - › Basic knowledge of first aid with reference to a Material Safety Data Sheet (MSDS)
6. Fire Safety and Fire Fighting operations
- Oil and Chemical Tanker fire response organization and action to be taken
 - Fire hazards associated with cargo handling and transportation of hazardous and noxious liquids in bulk
 - Fire-fighting agents used to extinguish oil and chemical fires
 - Fixed fire-fighting foam operations
 - Portable fire-fighting foam operations
 - Fixed dry chemical system operations
 - Spill containment in relation to fire-fighting operations
7. Cargo operations
- › For oil and Chemical tankers
 - For Oil tankers
 - Cargo information
 - Inerting
 - Loading
 - Unloading
 - Tank cleaning
 - Purging and gas freeing
 - › For Chemical Tankers
 - Cargo information
 - Loading
 - Unloading
 - Tank cleaning and gas-freeing
8. Emergencies
- Basic knowledge of emergency procedures, including emergency shutdown
 - Organizational structure
 - Alarms
 - Emergency procedures
9. Pollution Prevention for Oil and Chemical Tankers
- Basic knowledge of the effects of oil and chemical pollution on human and marine life
 - Basic knowledge of shipboard procedures to prevent pollution
 - SOPEP and SMPEP Measures to be taken in the event of spillage, including the need to:
 - report relevant information to the responsible persons
 - assist in implementing shipboard spill containment procedures
10. Case Studies on oil and NLS ship emergencies
- Fire and Explosion during unloading operations on an oil tanker
 - Collapsing of seamen during squeegeeing operations



Assessment Methods

1. Demonstration of knowledge & understanding of specific topics/ subjects will be assessed during the classes through a written assignment or oral assessment or based on observation during case study presentations and exercises.

A3 Basic Training for Liquefied Gas Tanker Cargo Operations



Code: **MBLGT**



5 days



Course Scope

1. This course provides training to candidates to be duly qualified under Section A – V/1-2 of the STCW code with specific duties for loading, unloading and care in transit or handling of liquefied gas cargoes. It comprises a basic training programme appropriate to their duties, including liquefied gas tanker safety, fire safety measures, pollution prevention, operational practice and obligations under applicable law and regulations. The course covers the competence requirements as given in the table under Section A-V/1-2-1 of the STCW Code adopted by the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 as amended in 2010.
2. Any of this training may be given on board or ashore. It could be either by practical instruction on board or in a suitable shore-based installation.
3. During the course, there will be:
 - Familiarization with the equipment & instrumentation used for cargo handling on a liquefied gas tanker
 - A greater awareness of the need of proper planning, the use of checklists involved in the various cargo handling operations
 - An enhanced awareness to follow and safe procedures at all times when carrying out the various operations on board a liquefied gas tanker
 - Follow procedures & instructions to promote safety and protect the marine environment
 - To co-ordinate during emergencies



Entry Requirements

1. This course is open to seafarers who have qualified in accordance with regulation Section AVI/ 1 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended including the Manila amendments 2010 approved by the Administration.



Course Outline

1. Basic knowledge of liquefied gas tankers
 - Types of liquefied gas tankers
 - General arrangement and construction
2. Basic knowledge of cargo operations
 - Piping systems and valves
 - Cargo handling equipment
 - Loading, unloading and care in transit
 - Emergency shutdown (ESD) system
 - Tank cleaning, purging, gas freeing and inerting
3. Basic knowledge of the physical properties of liquefied gases
 - Properties and characteristics
 - Pressure and temperature; including vapour pressure / temperature relationship
 - Types of electrostatic charge generation
 - Chemical symbols
4. Knowledge and understanding of tanker safety culture and safety management
5. Basic knowledge of the hazards associated with tanker operations
 - Health hazards
 - Environmental hazards
 - Reactivity hazards
 - Corrosion hazards
 - Explosion and flammability hazards
 - Electrostatic hazards
 - Toxicity hazards
 - Vapour leaks and clouds
 - Extremely low temperatures
 - Pressure hazards
6. Basic knowledge of hazard controls:
 - Inerting, drying and monitoring techniques
 - Anti-static measures
 - Ventilation
 - Segregation
 - Cargo inhibition
 - Importance of cargo compatibility
 - Atmospheric control
 - Gas testing
7. Understanding of information on a Material Safety Data Sheet
8. Function and proper use of gas-measuring instruments and similar equipment
 - Breathing apparatus and tank-evacuating equipment
 - Protective clothing and equipment
 - Resuscitators
 - Rescue and escape equipment
9. Basic knowledge of safe working practices and procedures in accordance with legislation and industry guidelines and personal shipboard safety relevant to liquefied gas tankers, including:
 - Precautions to be taken when entering enclosed spaces
 - Precautions to be taken before and during repair and maintenance work
 - Safety measures for hot and cold work
 - Electrical safety

- Ship/shore safety checklist
10. Basic knowledge of first aid with reference to a Material Safety Data Sheet
 11. Fire safety and firefighting operations
 - Tanker fire organization and action to be taken
 - Special hazards associated with cargo handling and transportation of liquefied gases in bulk
 - Fire-fighting agents used to extinguish gas fires
 - Fixed fire-fighting foam system operations
 - Portable fire-fighting foam operations
 - Fixed dry chemical system operations
 12. Basic knowledge of spill containment in relation to fire-fighting operations: Emergencies, Respond to emergencies
 13. Basic knowledge of emergency procedures, including emergency shutdown: Pollution Prevention, take precautions to prevent pollution of the environment from the release of liquefied gases
 14. Basic knowledge of the effects of pollution on human and marine life
 15. Basic knowledge of shipboard procedures to prevent pollution
 16. Basic knowledge of measures to be taken in the event of spillage.
 - Report relevant information to the responsible persons
 - Assist in implementing shipboard spill-containment procedures
 - Prevent brittle fracture
 17. Case Study



Assessment Methods

1. Though no formal written or practical test is prescribed, each trainee's progress will be closely monitored by lecturers & instructors, throughout the course, to ensure that training objectives are being achieved and the trainee is able to demonstrate the level of knowledge & understanding and relevant skills required, so as to undertake the tasks, duties and responsibilities at an operational and/or support level on any liquefied gas tanker.
2. Demonstration of knowledge & understanding of specific topics/ subjects will be assessed during the classes through a written assignment or oral assessment, or based on observation during case study presentations and exercises.

A4 Proficiency in Survival Craft & Rescue Boats Other Than Fast Rescue Boats



Code: MSCR



6 days (including exam by MARDEP)



Course Scope

1. To equip the trainees with the essential knowledge and experience of survival principles and techniques, and to make them sufficiently proficient in handling survival craft with a view to enable them to become capable of taking leading role in a survival situation to preserve the lives of those in their charge, in the event of a marine casualty.
2. The course content meets the requirements of STCW Code Chapter VI section A-VI/2 of STCW 1978 as amended in 1995, including amendment by IMO res. MSC.209(81) adopted on 2006-05-18 and applicable from 2008-01-01.



Entry Requirements

1. For Sea-going Personnel with Seamen's Documents:
 - Be not less than 18 years of age. Evidence in the form of a Malaysian Birth Certificate and/or Malaysian National Registration Identity Card, or an International Passport (for non-Malaysian) will be required;
 - Have approved sea-going service of not less than 12 months; OR
 - Have attended an approved training course and have approved sea-going service of not less than SIX months;
 - Be medically and physically fit for strenuous activity associated with survival training, including entry into water. Candidates will be liable for proof of medical fitness, if required.

2. For Offshore Personnel without Seamen's Documents or Sea-going service:
 - Be not less than 18 years of age. Evidence in the form of either a Malaysian Birth Certificate and/ or Malaysian National Registration Identity Card, or an International Passport (for non-Malaysian) will be required;
 - Have approved sea-going service of not less than 12 months (360 eight-hour days) on Deck on board vessels of 65 ft. or more in length serving on Foreign-going, Home-trade, or Local-trade ships. Service other than on Deck will be counted as half-time.
 - Service on fixed offshore structures (i.e. platforms) will also be counted as half-time provided: -
 - The structure is equipped with Life-boats/Survival capsules meeting the relevant SOLAS Convention requirements and approved by the National Maritime Administration;
 - All regular survival craft drills were held on the structure, as evidenced in the company log; and
 - The candidate has been trained in the use and maintenance of that equipment during his qualifying time on board the structure.
 - Evidence of the above qualifying time on offshore structures/vessels will need to be produced, on Company letterhead, verified as true and correct by a responsible officer of the Company (A format of this "information letter" is available from the Academy and should be used in all cases).

3. Be medically and physically fit for strenuous activity associated with survival training, including entry into water. Candidates will be liable for proof of medical fitness, if required.



Course Outline

1. Introduction and safety
 - Introduction
 - Safety guidance
2. General
 - Emergency Situations
 - Types of Emergency
 - Emergency Signals
 - Muster List
3. Abandon ship
 - Actions to be taken when required to abandon ship
 - Actions to be taken when in the water
4. Survival craft and rescue boats
 - Lifeboats
 - Liferrafts
 - Rescue boats
5. Launching arrangements
 - Boat davits
 - Life raft davits
 - Rescue boat davits
 - Free-fall
 - Float-free arrangements
 - Marine evacuation systems
6. Evacuation and recovery of survival craft and rescue boats
 - Launching
 - Clearing the ship's side
 - Marshalling life rafts and rescuing survivors from the sea
 - Recovery of survival craft and rescue boats
 - Launching survival craft and rescue boats in rough sea
 - Recovery of rescue boats in rough sea

7. Actions to take when clear of the ship
8. Lifeboat engine and accessories
 - Starting the engine
 - Cooling systems
 - Battery charging
 - Fire extinguisher
 - Water spray system
 - Self-contained air support system
9. Rescue boat outboard engine
10. Handling survival craft and rescue boats in rough weather
 - Boats
 - Liferrafts
 - Beaching
11. Actions to take when aboard a survival craft
 - Initial actions
 - Routines for survival
 - Use of equipment
 - Apportionment of food and water
 - Action to take to maximize detectability and location of survival craft
12. Methods of helicopter rescue
 - Communicating with the helicopter
 - Evacuation from ship and survival craft
 - Helicopter pick-up
13. Hypothermia
14. Radio equipment
 - Two-way VHF radiotelephone apparatus
 - Emergency position-indicating radio beacons (EPIRBs)
 - Search and rescue transponder beacons (SARTs)
 - Distress signals, signalling equipment and pyrotechnics
15. First Aid
 - Resuscitation techniques
 - First aid
16. Drills in launching and recovering boats
17. Drills in launching life rafts
 - Davit- launch life rafts
 - Throw- over board life rafts
 - Boarding a life raft from the water
 - Righting an inverted life raft
18. Drills in Launching and recovering rescue boats
19. Practical exercises and evaluation



Assessment Methods

1. There will be a practical and oral test conducted by an examiner appointed by Marine Department of Malaysia to assess the level of competency of the trainees.

A5 Advanced Fire Fighting



Code: MAFF



4 days



Course Scope

1. The aim of the course is to provide the participant with thorough knowledge and fundamental skills for undertaking control of advanced firefighting operations on board ship; organizing and training fire parties, inspection and servicing of fire detection and extinguishing systems and equipment, and for investigating and reporting on incidents involving fires on board. The course certificate is part of the Certificate of Competency, as regulation VI/3 of STCW 1978 as amended 2010 states clearly that:
 - Seafarers designated to control firefighting operations shall have successfully completed advance training in techniques for fighting fire with particular emphasis on organization, tactics and command in accordance with the provisions of section A-VI/3 of the STCW Code and shall meet the standard of competence specified therein.
 - Where training in advanced firefighting is not included in the qualifications for the certificate to be issued, a special certificate or documentary evidence, as appropriate, shall be issued indicating that the holder has attended a course of training in advanced firefighting.



Entry Requirements

1. Prior to entry into the course, the participant must provide evidence of:
 - Having satisfactorily completed an approved Basic Fire Fighting at Sea course, or equivalent (covering the syllabus under the Annex 1 to IMO Res. A.437(XI)), or Table A-VI/1-2 of the 2010 amendments to STCW 1978) .
 - Having declared that he or she is in good health for strenuous activity during training.
(Note: To include and incorporate seaman identification card and possess a valid seafarer medical certificate issue by an approved medical practitioner).



Course Outline

1. Introduction, Safety and Principles
 - Main Aim
 - Safety Rules
 - Principle of survival in relation to fire
2. Theory of Fire
 - Conditions for fires
 - Principles of fire fighting
 - Classification of fires and appropriate extinguishing agents.
3. Fire Control Aboard Ships
 - Areas of Fire Hazard
 - Fire Precaution
4. Ship Fire-Fighting Organization
 - Central station will be on the bridge
 - Master will be in charge
 - Fire Officer report to bridge and received instruction
 - Information required on the bridge
 - Available information on the bridge
 - Communication method
 - Method of damage control and containment of fire
 - Organization of fire parties
 - Stability
5. Procedures for Fire Fighting
 - Ship at Sea
 - Ship in Port
 - Ship having cargo of dangerous goods
 - Oil Tankers
6. Training of Seafarers in Fire Fighting
 - Emergency procedure instruction
 - Fire drill and training
 - Training member of fire party
 - Training of operator fire petrol
 - Demonstrate the ability of exercise
 - Recharge, repair and maintenance of fire extinguisher
7. Inspection and Servicing of fire appliances & Equipment.
 - Fire Alarms
 - Fire Detection Equipment
 - Fixed Fire-Extinguishing Equipment
 - Fire main, hydrants, hoses & nozzles.
 - Portable & mobile fire-extinguishing equipment
 - Fireman's outfits.
 - Fire control plans
8. Firefighting Process Hazards
 - Dry distillation
 - Chemical Reactions
 - Boiler Uptake Fires
 - Fires in water tube boilers
9. First Aid
 - Main hazard arising from fires for the health of personnel
 - Explains
 - Important of first-aid measures being followed up with medical treatment
 - First-aid measures in cases of asphyxiation and poisoning
 - Demonstration
 - First-aid treatment for burns
 - Bandaging and treatment for shock
10. Fire Investigation and Reporting
 - Record of the fire investigation
 - Detail report on the fire investigation
 - Conclusion of report
11. Case Studies
 - Trainee's experience of fires on ships
 - Documented reports of fires on ships and lessons learned.



Assessment Methods

1. There will be no formal extermination, but there will be continuous assessment on the demonstration of competencies by the Lecturers/Instructors.

A6 Medical First Aid



Code: MMFA



3 days



Course Scope

1. The aim To provide the training of medical first aid on board ship for candidates, in accordance with Section A-VI/4 and Table A-VI/4-1 of the STCW Code. As such, candidates should be able to apply immediate first aid in the event of accident or illness on board.



Entry Requirements

1. Participants should possess seaman identification card and a valid seafarer medical certificate issued by an approved medical practitioner.
2. Participants should also have completed IMO Model Course No. 1.14, Elementary First Aid or attained a similar standard in elementary first aid.



Course Outline

1. Immediate Action
2. First Aid Kit
3. Body Structure and Functions
4. Toxicological Hazards Aboard Ship
5. Examination of Patient
6. Spinal Injuries
7. Burns, Scalds, Effect of Heat and Cold
8. Fractures, Dislocations and Muscular
9. Injuries
10. Medical Care of Rescued Persons,
11. including Distress, Hypothermia and Cold Exposure
12. Radio Medical Advice
13. Pharmacology
14. Sterilization
15. Cardiac Arrest, Drowning and Asphyxia
16. Psychological / Psychiatric problem



Assessment Methods

1. Written assessment is prescribed for each trainee and the progress will be closely monitored by the Instructor throughout the training, to ensure that the training objectives are being achieved and the trainee is able to demonstrate the level of competence to undertake the tasks, duties and responsibilities listed in Column 1 of Table A-VI/4- 1 of the STCW Code (2010 amendments to STCW'78). The criteria for evaluation of competence will include (but not limited to) the trainee demonstrating:
 - The identification of probable cause, nature and extent of injuries is prompt, complete and conforms to current first-aid practice.
 - Risk of harm to self and others is minimized at all times
 - Treatment of injuries and the patient's condition is appropriate, conforms to recognized first-aid practice and international guidelines.
2. Knowledge of specific topics/ subjects, in which a candidate must demonstrate competency, will be assessed through a written or oral assessment with pass criteria of at least 60% (of the aggregate score). Demonstration of competence in skills, as stated in the syllabus, may be assessed on a continuous basis during practical sessions or by a practical test of skill towards the end of the training sessions and will be graded Pass/Fail. To qualify for the award of the Medical First-Aid Certificate the trainee must pass in both parts.
3. Trainees who fail in only the written/ oral part of the assessment may be re-examined within 6 months of completing the Course, without attending another Course Session.
4. The attendance of the course is necessary for certification. Participants must have a regular class attendance of 90% or over. Those who fail to meet this requirement may be disqualified from issue of the course completion certificate.

A7 Medical Care



Code: MMC



5 days



Course Scope

1. The aim of the Course is to provide the training for candidates to provide medical care to the sick and injured while they remain on board ship, in accordance with Section A-VI/4 and Table A-VI/4-2 of the STCW Code.



Entry Requirements

1. The course is open to seafarers to be designated to be in charge of medical care on board ships. Those entering the course should have successfully completed training in medical first aid on board ship, such as specified in the IMO Model Course 1.14 Medical First Aid.
2. The course is also open to seafarers who have previously completed this Medical Care training and wish to comply with the recommendation in the IMO/ILO Document for Guidance, 1985 that a refresher course should be undertaken at intervals of approximately five years.



Course Outline

1. First Aid – Revision
2. Care of Casualties
3. Aspects of Nursing
4. Diseases
5. Alcohol and Drug Abuse
6. Dental Care
7. Gynaecology and Pregnancy
8. Medical Care of Rescued Persons, including Distress, Hypothermia and Cold Exposure
9. Death at Sea
10. Environmental control on board Ship
11. Disease Prevention
12. Keeping of Records
13. Medicines and Medical Equipment
14. Surgical Equipment, Instruments and Supplies
15. External Assistance



Assessment Methods

1. Written assessment is prescribed for each trainee and the progress will be closely monitored by the Instructor throughout the training, to ensure that the training objectives are being achieved and the trainee is able to demonstrate the level of competence to undertake the tasks, duties and responsibilities listed in Column 1 of Table A-VI/4- 2 of the STCW Code (2010 amendments to STCW'78). The criteria for evaluation of competence will include:
 - Identification of symptoms is based on the concepts of clinical examination and medical history.
 - Protection against infection and spread of diseases is complete and effective.
 - Personal attitude is calm, confident and reassuring.
 - Treatment of injury or condition is appropriate and conforms to accepted medical practice and relevant national and international medical guides.
 - The dosage and application of drugs and medication complies with manufactures' recommendation and accepted medical practice.
 - The significance of changes in patient's condition is promptly recognized.
2. Knowledge of specific topics/ subjects, in which a candidate must demonstrate competency, will be assessed through a written assessment with pass criteria of at least 60% (of the aggregate score). Demonstration of competence in skills, as stated in the syllabus, may be assessed on a continuous basis during practical sessions. To qualify for the award of the Medical Care Certificate the trainee must pass in written assessment.
3. An examination will be conducted at the end of the course by an examiner. The examination will consist of two parts.
 - Part A will consist of objective question without the use of SCMG.
 - Part B will also consist of objective question and the students will be allowed to make use of the SCMG (open book).
4. Trainees who fail in only the written part of the assessment may be re-examined within 6 months of completing the Course, without attending another Course Session.

A8 Advanced Training for Oil Tanker Cargo Operations



Code: MOT



5 days



Course Scope

1. This course provides training to candidates to be duly qualified under Section A – V/1-1 para 2 of the STCW code with specific duties for loading, unloading and care in transit or handling of oil cargoes. It comprises an advanced training programme appropriate to their duties, including oil tanker safety, fire safety measures, pollution prevention, operational practice and obligations under applicable law and regulations. The course covers the competence requirements as given in the table under Section A-V/1-1-2 of the STCW Code adopted by the International Convention on Standards of Training, Certification and Watch keeping for Seafarers, 1978 as amended in 2010.
2. During the course, there will be:
 - Familiarization with the equipment, instrumentation and controls used for cargo handling on an oil tanker
 - A greater awareness of the need of proper planning, the use of checklists and the time scales involved in the various cargo handling operations
 - An enhanced awareness to apply proper and safe procedures at all times when carrying out the various operations on board an oil tanker
 - An acquisition of experience in identifying operational problems and assist in solving them.
 - An improvement in the ability to promote safety and protect the marine environment
 - An increased ability to assist and co-ordinate actions during emergencies



Entry Requirements

1. This course is open to seafarers who have qualified in accordance with regulation Section A V/1-1 para 2 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended including the Manila amendments 2010 approved by the Administration which includes at least three months of approved seagoing service on oil tanker.



Course Outline

1. Oil tanker design, systems and equipment
 - General arrangement and construction
 - Pumping arrangement and equipment
 - Tank arrangement, pipeline system and tank venting arrangement
 - Gauging systems and alarms
 - Cargo heating systems
 - Tank cleaning, gas freeing and inerting systems
 - Ballast system
 - Cargo area venting and accommodation ventilation
 - Slop arrangements
 - Vapour recovery systems
 - Cargo-related electrical and electronic control system
 - Environmental protection equipment, including Oil Discharge Monitoring Equipment (ODME)TOTAL
 - Tank coating
 - Tank temperature and pressure control systems
 - Fire-fighting systems
2. Pump theory and characteristics, including types of cargo pumps and their safe operation
 - Pump theory and characteristics including types of cargo pumps
 - Pressure Surge
3. Tanker safety culture and implementation of safety-management system
4. Knowledge and understanding of monitoring and safety systems, including the emergency shutdown
5. Loading, unloading, care and handling of cargo
 - Ability to perform cargo measurements and calculations
6. Knowledge of the effect of bulk liquid cargoes on trim, stability and structural integrity
7. Knowledge and understanding of oil cargo related operations
 - Loading and unloading plans
 - Ballasting and Deballasting
 - Tank cleaning operations
 - Inerting
 - Gas-freeing
 - Ship-to-ship transfers
 - Load on top
 - Crude oil washing
8. Development and application of cargo-related operation plans, procedures and checklists
9. Ability to calibrate and use monitoring and gas-detection systems, instruments and equipment
10. Ability to manage and supervise personnel with cargo-related responsibilities
11. Knowledge and understanding of the physical and chemical properties of oil cargoes
 - Physical Properties
 - Chemical Properties
 - Understanding the information contained in a Material Safety Data Sheet (MSDS)

- 12. Knowledge and understanding of the hazards and control measures associated with oil tanker cargo operations
 - Toxicity
 - Flammability and Explosion
 - Health Hazards
 - Inert Gas Composition
 - Electrostatic Hazards
 - Oxygen deficiency
 - Knowledge and understanding of dangers of non-compliance with relevant rules / regulations
- 13. Knowledge and understanding of safe working practices, including risk assessment and personal shipboard safety relevant to oil tankers
 - Precautions to be taken when entering enclosed spaces, including correct use of different types of breathing apparatus.
 - Precautions to be taken before and during repairs and maintenance work
 - Precautions for hot and cold work
 - Precautions for electrical safety
 - Use of appropriate Personal Protective Equipment. (PPE)
- 14. Knowledge and understanding of oil tanker emergency procedures
 - Ship emergency response plan
 - Cargo Operations emergency shut down
 - Actions to be taken in the event of failure of systems or services essential to cargo
 - Firefighting on oil tankers
 - Enclosed space Rescue
 - Use of Material Safety data sheet (MSDS)
- 15. Actions to be taken following collision, grounding, or spillage
- 16. Knowledge of medical first aid procedures on board oil tankers
- 17. Understanding of procedures to prevent pollution of the atmosphere and the environment
 - Pollution prevention requirements of Ship's construction and equipment
 - Controlled operational pollution at sea
 - Prevention of pollution in port
 - Importance of the Oil Record Book (ORB) for pollution prevention
 - Air pollution
- 18. Knowledge and understanding of relevant provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL), as amended, and other relevant IMO instruments, industry guidelines and port regulations as commonly applied



Assessment Methods

1. Though no formal written or practical test is prescribed, each trainee's progress will be closely monitored by lecturers & instructors, throughout the course, to ensure that training objectives are being achieved and the trainee is able to demonstrate the level of knowledge & understanding and relevant skills required, so as to undertake the tasks, duties and responsibilities at an operational and/or support level on any oil tanker.
2. Demonstration of knowledge & understanding of specific topics/ subjects will be assessed during the classes through a written assignment or oral assessment, or based on observation during case study presentations and exercises.
3. Attendance
 - The full attendance (100%) of the course is necessary for certification. Those who fail to meet this requirement may be disqualified from issue of the course completion certificate.

A9 Advanced Training for Chemical Tanker Cargo Operations



Code: MCT(A)



5.5 days



Course Scope

1. The aim of the course is to ensure that participants, who are likely to have immediate responsibility for cargo operations, gain a thorough understanding of the procedures for safe and pollution-free handling and transportation of bulk liquid chemicals, and to enable them to supervise and train other personnel in operational procedures.
2. This course complied with the requirement in Section A-V/1-1 Paragraph 3 Table A-V/1-1-3 of STCW Convention and Code.



Entry Requirements

1. This course is open to seafarers who have qualified in accordance with regulation Section A V/1-1 para 2 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended including the Manila amendments 2010 approved by the Administration which includes at least three months of approved seagoing service on chemical tanker.



Course Outline

1. Introduction
2. Chemistry and Physics
3. Hazards
4. Rules and Regulations
5. Ship Design and Containment
6. Cargo Handling System
7. Safety and Pollution Prevention
8. Cargo Handling and Ballast Operations
9. Tank Cleaning Operations
10. Risk Management on Chemical Tankers
11. Terminal Operations and Ship/Shore Interface
12. Emergency Operations
13. Contingency Planning
14. Assessment/Discussion/Case Studies



Assessment Methods

1. Though no formal written or practical test is prescribed, each trainee's progress will be closely monitored by lecturers & instructors, throughout the course, to ensure that training objectives are being achieved and the trainee is able to demonstrate the level of knowledge & understanding and relevant skills required, so as to undertake the tasks, duties and responsibilities at an operational and/or support level on any oil, chemical or liquefied gas tanker.
2. Demonstration of knowledge & understanding of specific topics/ subjects will be assessed during the classes through a written or oral assessment, or based in observation during case study presentations and exercises. Demonstrations of competence in skills, pertaining to use of equipment, may be assessed during practical sessions or by a practical test of skill towards the end of the training.

A10 Advanced Training for Liquefied Gas Tanker Cargo Operations



Code: MLGT (A)



5 days



Course Scope

1. The aim of the course is to ensure that participants, who are likely to have immediate responsibility for cargo operations gain on board Liquefied Gas Tankers, gain a thorough understanding of safe and pollution-free handling and transportation of liquefied natural, petroleum and chemical gases in bulk, and to enable them to supervise and train other personnel in operational procedures.
2. This course complied with requirement in Section A-V/1-2 Paragraph 2 Table A-V/1-2-2 of STCW Convention and Code.



Entry Requirements

1. This course is open to seafarers who have qualified in accordance with regulation Section A V/1-2 para 2 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended including the Manila amendments 2010 approved by the Administration which includes at least three months of approved seagoing service on liquefied gas tanker.



Course Outline

1. Introduction
 - The course
 - Production of liquefied gas
 - Sea transport of liquefied gas
2. Chemistry and physics
 - Properties and characteristics of liquefied gases and their vapour
 - Basic thermodynamic theory
 - Properties of single liquids
 - Nature and properties of solutions
3. Hazards
 - Health hazards
 - First Aid Treatment
 - Reactivity
 - Flammability and explosion hazards
 - Repairs and Hot work
4. Rules and regulations
 - International and national codes and regulations
 - Gas carrier codes
 - Certification and surveys
5. Ship design and cargo containment
 - Construction and equipment requirements
 - Ship arrangement
 - Cargo containment
 - Ship types and survival capability
6. Cargo handling systems
 - Tanks, piping and valves
 - Cargo ventilation system
 - Pumps and the unloading system
 - Heat exchangers
 - Reliquefaction systems and control of boil-off
 - Inert gas system
 - Instrumentation and auxiliary systems
7. Safety
 - Tank atmosphere evaluation
 - Fire prevention and equipment
 - Pollution
 - Protective and safety equipment
8. Cargo handling operations
 - General
 - Procedures for preparation for loading and unloading
 - Cargo measurement and calculation
 - Cargo condition maintenance on passage and in port
 - Procedures for preparation for loading and unloading
 - Ballasting and deballasting
 - Procedures for changing cargoes and tank cleaning
9. Ship/shore interface
10. Emergency operations
 - Organizational structure and planning
 - Alarms
 - Emergency procedures



Assessment Methods

1. No formal examination is conducted. But the continuous assessment by the lecturers is carried out, based on case studies and the group discussions, and the full attendance of the course is necessary for certification.
2. Participants must have a regular class attendance of 100%. Those who fail to meet this requirement may be disqualified from issue of the course completion certificate.

A11 Advanced Training for Oil Tanker Cargo Operation (Revalidation)



Code: MOT(R)



1 day



Course Scope

1. The aim of this course is to fulfil the 5 years' revalidation requirement as per Malaysian Marine Department. This course provides training to candidates to be duly qualified under Section A – V/1-1 para 2 of the STCW code with specific duties for loading, unloading and care in transit or handling of oil cargoes.
2. During the course, there will be:
 - An enhanced awareness to apply proper and safe procedures at all times when carrying out the various operations on board an oil, chemical and gas tanker
 - An acquisition of experience in identifying operational problems and assist in solving them.
 - An improvement in the ability to promote safety and protect the marine environment



Entry Requirements

1. This course is open to seafarers who have qualified in accordance with regulation Section A VI/ 1 of the International Convention on Standards of Training, Certification and Watch keeping for Seafarers 1978, as amended including the Manila amendments 2010 approved by the Administration.
2. The seafarer must have attended Advance Oil Tanker Cargo Operations Course.



Course Outline

1. Proficiency in tanker safety culture and implementation of safety-management system
 - New updates on Oil Tanker
 - Latest updates from SOLAS, MARPOL and other circulars from IMO
2. Knowledge and understanding of safe working practices, including risk assessment and personal shipboard safety relevant to oil tanker Accident report from Oil Tanker
 - Group Discussion on Risk Assessments for various tanker operation: Loading, Unloading, Entry into Enclosed Space and Hot work
3. Case study / Group Presentations
 - Group Presentation on Risk Assessments for various tanker operation: Loading, Unloading, Entry into Enclosed Space and Hot work.
 - Case study accident report from Oil Tanker



Assessment Methods

1. Though no formal written or practical test is prescribed, each trainee's progress will be closely monitored by lecturers & instructors, throughout the course, to ensure that training objectives are being achieved and the trainee is able to demonstrate the level of knowledge & understanding and relevant skills required, so as to undertake the tasks, duties and responsibilities at a management/operational level on any oil tanker.
 - Demonstration of knowledge & understanding of specific topics/subjects will be assessed during the classes through a written assignment or oral assessment, or based on observation during case study presentations and exercises.
2. Attendance
 - The full attendance of the course is necessary for certification. Participants must have a class attendance of 100%. Those who fail to meet this requirement may be disqualified from issue of the course completion certificate.

A12 Advanced Training for Chemical Tanker Cargo Operation (Revalidation)



Code: MCT (R)



1 day



Course Scope

1. The aim of the course is to ensure that participants, who are likely to have immediate responsibility for cargo operations, are updated with the latest regulations and amendments for the safe and pollution-free handling and transportation of bulk liquid chemicals. And to refresh the participants the important of proper cargo stowage planning complying to international rules and regulations.



Entry Requirements

1. The course is principally intended for Masters, Chief Engineer Officers, Chief Officers, Second Engineer Officers and any other persons likely to have immediate responsibility for loading, discharging, care in transit or handling of bulk liquid chemical cargoes. The person must possess Certificate of Proficiency in advanced training for chemical tanker cargo operations as stated in Section A-V/1-1 Paragraph 3 of STCW Convention.



Course Outline

1. Introduction / Pre-Test
2. Rules and Regulations
3. Cargo stowage planning
4. Risk Management
5. Case Study / Group Presentation
6. Assessment



Assessment Methods

1. Though no formal written or practical test is prescribed, each trainee's progress will be closely monitored by lecturers and instructors, throughout the course, to ensure that training objectives are being achieved.
2. Demonstration of knowledge and understanding of specific topics/ subjects will be assessed during the classes through a written or oral assessment, or based in observation during case study presentations and exercises.

A13 Advanced Training for Liquefied Gas Tanker Cargo Operation (Revalidation)



Code: MLGT (R)



1 day



Course Scope

1. The aim of the course is to comply with the 5 years' revalidation requirement under the STCW Convention as per Regulations V/1-2 which applies to Certificate of Proficiency or endorsement to a Certificate of Competency for masters and officers on liquefied gas tankers.



Entry Requirements

1. Candidate must be in possession of an approved advanced training for liquefied gas tanker cargo operation certification in compliance with the standard of competence specified in section A-V/1-2 of the STCW Code.



Course Outline

1. Course Introduction and Assessment
 - Pre-Test
2. Proficiency in the use of the IBC and IGC Codes and related documents
 - Proficiency in the use of the IBC and IGC Codes and related documents
3. Proficiency to apply safe preparations, procedures and checklists for all cargo operations
 - Procedures for preparation for loading and unloading
 - Procedures for preparation for unloading and unloading
4. Case Study/Group Presentation
5. Assessment and Evaluation



Assessment Methods

1. No formal examination is conducted. But the continuous assessment by the lecturers is carried out, based on case studies and the group discussions, and the full attendance of the course is necessary for certification.
2. Participants must have a regular class attendance of 100 %. Those who fail to meet this requirement may be disqualified from issue of the course completion certificate.

A14 Proficiency in Survival Craft & Rescue Boat (Revalidation)



Code: MSCR (R)



1 day



Course Scope

1. The aim of the course is to provide the five-year revalidation training covering the competence listed in column 1 of table A-VI/2-1 in accordance with Chapter VI, paragraph 5 and 6 of STCW 2010.



Course Outline

1. Initial knowledge assessment
2. Take charge of survival craft or rescue boats
3. Managing survivors and survival craft after abandoning ship
4. Practical Assessment and Evaluation



Entry Requirements

1. The course is open to all seafarers seeking their five-year revalidation in accordance with the revised STCW 2010 Manila amendment.
2. Participants shall have attended and in possession of STCW certificate of "Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats"
3. Participants should be in good health to undertake the practical activities and must be certified by a doctor to be in good health.



Assessment Methods

1. Though no formal examination is prescribed, each trainee's progress will be closely monitored throughout the course.
2. Practical competence of trainees will be evaluated based on trainee being able to successfully demonstrate and carrying out the important task listed out in STCW 2010, Chapter VI, table A-VI/2, column 3.

A15 Advanced Fire Fighting (Revalidation)



Code: MAFF (R)



1 day



Course Scope

1. The aim of the course is to provide the participant with thorough knowledge and fundamental skills for undertaking control of advanced firefighting operations on board ship; organizing and training fire parties, inspection and servicing of fire detection and extinguishing systems and equipment, and for investigating and reporting on incidents involving fires on board. The course certificate is part of the Certificate of Competency, as section A-VI/3 of STCW 2010 states clearly that:
 - Seafarers designated to control firefighting operations shall have successfully completed advance training in techniques for fighting fire with particular emphasis on organization, tactics and command in accordance with the provisions column 1 of table A-VI/3 of the STCW Code and shall meet the standard of competence specified therein.
 - Where training in advanced firefighting is not included in the qualifications for the certificate to be issued, a special certificate or documentary evidence, as appropriate, shall be issued indicating that the holder has attended a course of training in advanced firefighting.



Entry Requirements

1. The course is open to all seafarers seeking their five-year revalidation in accordance with (IAW) the revised STCW 2010 serving or re-entering to the merchant navy. All seafarers should undertake this course as part of the aforementioned five-year revalidation requirement for employment on sea going ships. Participants should be in good health to undertake the fire- fighting practical activities and must be certified by a doctor to be in good health



Course Outline

1. Introduction and pre-test
2. Tactic and procedure of fire control when ship at sea
3. Tactic and procedure of fire control when ship at port
4. Communication and coordination during firefighting operation
5. Preparation of contingency plan.
6. Practical assessment & evaluation



Assessment Methods

1. Though no formal written or practical test is prescribed, each trainee's progress will be closely monitored by the Lecturers/Instructors throughout the course, to ensure that the training objectives are achieved and the trainee demonstrates the required level of competence as listed under column 3 of Table A-VI/3 of the STCW Code (2010 amendments to the STCW 1978). The criteria for evaluating competence will include (but not limited to) the trainee demonstrating:
 - Those actions taken to control fires are based on a full and accurate assessment of the incident using all available sources of information.
 - That the order, priority, timing and sequence of actions is appropriate to the overall requirements of the incident and to minimize damage and potential damage to ship, injuries to personnel and impairment of the operational effectiveness of the ship.
 - That he understands that transmitting information promptly, accurately, completely and clearly is important.
 - That he understands the importance to safeguard personal safety during fire control activities at all times.
2. The attendance of the course is necessary for certification. Participants must have a regular class attendance of 100%. Those who fail to meet this requirement may be disqualified from issue of the course completion certificate.

A16 Basic Training (Revalidation)



Code: MBT (R)



1 day



Course Scope

1. The aim of the course is to provide the five-year revalidation basic training covering personal survival training and, fire prevention and fighting in accordance with Chapter VI, paragraph 3 and 4, considering Tables A-VI/1-1 and A-VI/1-2 of STCW 2010. Specifically, to all seafarers employed or engaged in any capacity on board ship as part of the ship's complement with designated personal survival, safety and fire prevention duties in the operation of ship.



Entry Requirements

1. The course is open to all seafarers seeking their five-year revalidation in accordance with (IAW) the revised STCW 2010 serving or re-entering to the merchant navy. All seafarers should undertake this course as part of the aforementioned five-year revalidation requirement for employment on sea going ships. Participants should be in good health to undertake the sea survival and firefighting practical activities and must be certified by a doctor to be in good health.



Course Outline

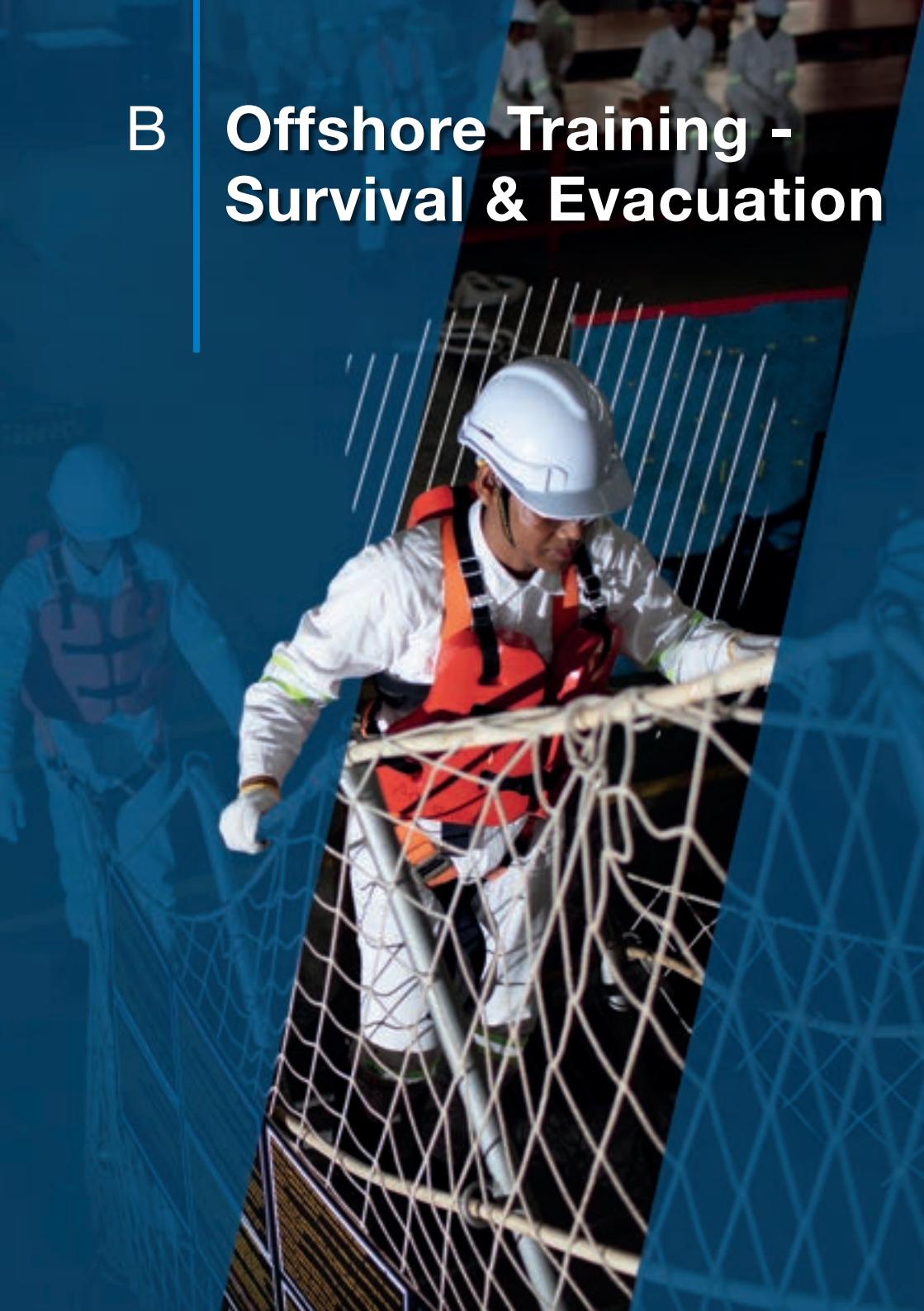
1. Location of appliances, use of equipment and classification of fires
 - Understanding the location and use of equipment
 - Know the location and use of firefighting appliances (FFA)
 - Know the location and use of life-saving appliances (LSA)
 - Classification of fire and applicable extinguishing agents
2. Organization of shipboard firefighting
 - Understand the organization of shipboard firefighting
 - Describe the organization of shipboard firefighting
3. BA Cleaning
 - Demonstrate an understanding of use and Cleaning of the BA
 - List the parts of the BA
 - Describe how to don the BA
 - Explain how to clean the BA
4. Practical using BA in smokehouse and charging Demo
 - Demonstrate use of the BA and rescue in the smokehouse
 - Describe how to charge the BA
5. Use and donning of lifejacket
 - Describe the donning of the lifejacket
 - Demonstrate the use of lifejacket
6. Boarding the Survival Craft
 - Understand the actions required for boarding survival craft
7. Practical and assessment in personal survival techniques
 - Demonstration, practical and assessment in personal survival techniques



Assessment Methods

1. Though no formal examination is prescribed, each trainee's progress will be closely monitored throughout the course and theoretical competence will be assessed based on trainees being able to answer objective questionnaire.
2. Practical competence of trainees will be evaluated based on trainee being able to successfully demonstrate carrying out the important task listed.

B Offshore Training - Survival & Evacuation



B1 Basic Offshore Safety Induction & Emergency Training with EBS & Travel Safely by Boat (OPITO Approved)



Code: SBET



3 days



Course Scope

1. To introduce delegates to the specific safety issues and regimes relevant to offshore installations, and to equip them with the basic emergency response knowledge and skills for travelling to and from offshore installations by helicopter.



Entry Requirements

1. No training pre-requisites are required. Participants should be in good health to undertake the sea survival and firefighting practical activities and must be certified by a doctor to be in good health.



Course Outline

1. Safety Induction
2. Fire Fighting & Self Rescue:
3. Helicopter Safety/HUET
4. Sea Survival (Theory & practice)



Assessment Methods

1. Though no formal examination is prescribed, each trainee's progress will be closely monitored throughout the course and theoretical competence will be assessed based on trainees being able to answer written MCQ questions.
2. Practical competence of trainees will be evaluated based on trainee being able to successfully demonstrate carrying out the important task listed.

B2 Further Offshore Emergency Training with EBS & Travel Safely by Boat (OPITO Approved)



Code: FOET



1 day



Course Scope

1. The aim of the course is to provide the four-year revalidation training providing delegates with the opportunity to practise and demonstrate emergency response skills which are not possible to practise during drills, exercises and emergency training offshore.



Entry Requirements

1. The FOET is open to persons who have a valid (in-date) OPITO-approved BOSIET (with EBS), BOSIET (with EBS), TBOSIET, FOET (with EBS), FOET (with EBS) or TFOET certificate.



Course Outline

1. Course Introduction
2. Fire Fighting & Self Rescue:
3. Helicopter Safety / HUET
4. Sea Survival (Theory & practice)



Assessment Methods

1. Though no formal examination is prescribed, each trainee's progress will be closely monitored throughout the course and theoretical competence will be assessed based on trainees being able to answer written MCQ questions.
2. Practical competence of trainees will be evaluated based on trainee being able to successfully demonstrate carrying out the important task listed.

B3 Travel Safely by Boat (OPITO Approved)



Code: STSB



0.5 day



Course Scope

1. The aims and objectives of the Travel Safely by Boat (TSbB) training standard are to ensure that all personnel travelling/transferring by boat to work in offshore areas achieve the following: Awareness of the risks to which they are exposed and how they are managed.



Course Outline

1. Introduction
2. Boat Travel
3. Practical Personal Transfer
4. Boat Emergencies
5. Boat Travel and Transfer
6. Boat Travel and Transfer Practical



Entry Requirements

1. No prerequisites are required. Delegates who are in possession of a current BOSIET (with EBS), FOET (with EBS), HUET (with EBS), Tropical BOSIET, Tropical FOET, Tropical HUET, BOSIET (with CA-EBS), HUET (with CA-EBS) or FOET (with CA-EBS) are not required to participate in practical life raft and in-water sea survival exercises.



Assessment Methods

1. Though no formal examination is prescribed, each trainee's progress will be closely monitored throughout the course and theoretical competence will be assessed based on trainees being able to answer written MCQ questions.
2. Practical competence of trainees will be evaluated based on trainee being able to successfully demonstrate carrying out the important task listed.

B4 HUET EBS

(OPITO Approved)



Code: SHUET



1 day



Course Scope

1. The aim of the HUET (with EBS) programme is to prepare delegates that intend to travel to and from offshore oil and gas installations and vessels by helicopter by providing specific training in pre-flight and in-flight requirements and to equip delegates with the basic emergency response knowledge and skills required in the event of a helicopter emergency – with specific focus on escaping from a helicopter following ditching.



Entry Requirements

1. Valid in-date offshore medical (Valid within 12 months)



Course Outline

1. Helicopter Safety / HUET:
 - Session objective
 - Check in procedures
 - Helicopter Transportation Suit, lifejacket & airpocket (EBS)
 - Pre-flight information
 - Helicopter boarding
 - In flight
 - Prior to landing
 - Disembarking
 - Helicopter safety requirements
 - Hazards during helicopter emergencies
 - Pre-ditching checks
 - Actions after ditching/emergency landing
 - Emergency landing on land
 - Surface evacuation

- Under water escape
- Rescue
- Pool safety procedures
- Heliraft demonstration
- Emergency landing on land
- Surface evacuation
- Demonstration of partial submersion & capsize with EBS
- Partial submersion exercise
- Capsize exercise
- Lifejacket inflation



Assessment Methods

1. Though no formal examination is prescribed, each trainee's progress will be closely monitored throughout the course and theoretical competence will be assessed based on trainees being able to answer written MCQ questions.
2. Practical competence of trainees will be evaluated based on trainee being able to successfully demonstrate carrying out the important task listed.



PROGRAMMES OFFERED BY

**POST SEA
NAUTICAL STUDIES
DEPARTMENT**

A ISPS Code



A1 Use of Leadership & Managerial Skills



Code: MLMS



5 Days



Course Scope

- Those who successfully complete this course should be able to demonstrate the knowledge, understanding and proficiency stipulated in Table A-II/2 and Table A-III/2 of the STCW 2010 in area of competence for “Use of Leadership and Managerial Skills:
 - Shipboard personnel management and training;
 - Related international maritime conventions and recommendations, and national legislation;
 - Tasks and workload management
 - Effective resource management;
 - Decision-making technique.
- minimum of 6 months’ shipboard service as Electrical Engineer or has completed a minimum of 6 months’ sea time as part of Electro Technical Officer approved training.



Course Outline

- Course introduction
- Shipboard personnel management and training
- International maritime conventions and recommendations, and national legislation
- Tasks and workload management
- Effective resource management
- Decision making techniques



Entry Requirements

- The trainees will require at least of the following requirements:
 - minimum of 12 months’ shipboard service in the capacity as Certificated Watchkeeping Officer or Certificated Watchkeeping Engineer Officer, OR



Assessment Methods

- MCQ

A2 Ship Security Officer



Code: MSS



3 days



Course Scope

1. At the end of the course, the candidate should be able to perform the duties and responsibilities as Ship Security Officer as stipulated in Part A section 2.1.6 and 12.2 of the ISPS Code, which include but not limited to the following:
 - Undertaking regular security inspections of the ship to ensure that the appropriate security measures are maintained;
 - Maintaining and supervising the implementation of the Ship's Security Plan (SSP) including any amendments to the plan;
 - Co-ordinating the security aspects of the handling of cargo and ship's stores with other shipboard personnel and with the relevant Port Facility Security Officers (PFSO);
 - Proposing modifications to the SSP;
 - Reporting to the Company Security Officer (CSO), any deficiencies and non-conformities identified during internal audits, periodic reviews, security inspections and verifications of compliance and implementing any corrective actions;
 - Enhancing security awareness and vigilance onboard;
 - Ensuring that adequate training has been provided to shipboard personnel, as appropriate;
 - Reporting all security incidents;
 - Co-ordinating implementation of the SSP with the CSO and relevant PFSO's; and
 - Ensuring that security equipment (if any) is properly operated, tested, calibrated and maintained.



Entry Requirements

1. There is no formal entry qualification. However, to interact effectively and derive maximum benefits from the course, candidates should preferably be a serving ship officer with a minimum of one-year shipboard experience in deck or engine department.



Course Outline

1. Course introduction.
2. Relevant international and national codes and recommendations;
3. Responsibilities and functions of security organisations
4. Methodology of ship security assessment
5. Methods of ship security surveys and inspections
6. Ship and port operations and conditions;
7. Ship and port facility security measures and techniques use to circumvent security measures;
8. Emergency preparedness and response and contingency planning;
9. Instruction techniques for security training and education, including security measures and procedures;
10. Handling sensitive security related information and security related communications;
11. Recognition and detection of weapons, dangerous substances and devices;
12. Recognition of characteristics and behavioural patterns of persons who are likely to threaten security;
13. Security equipment and systems and their operational limitations; Methods of physical searches and non-intrusive inspections;
14. Methods of conducting audits, inspection, control and monitoring;
15. Security drills and exercises, including drills and exercises with port facilities; Assessment of security drills and exercises.
16. Crowd Management & Control Technique



Assessment Methods

1. MCQ

A3 Company Security Officer



Code: MCS



3 days



Course Scope

- At the end of the course, the candidate should be able to perform the duties and responsibilities as a Company Security Officer as defined in Part A Section 2.1.7 and 11.2 of the ISPS Code and Section 247I under Act A1316 Merchant Shipping (Amendment and Extension) Act 2007, which include but not limited to the following:
 - Develop, maintain and supervise the implementation of a ship security plan.
 - Assess security risk, threat and vulnerability.
 - Ensure appropriate security measures are implemented and maintained.
 - Ensure that security equipment and any systems, if any, are properly operated; and
 - Encourage security awareness and vigilance.



Assessment Methods

- MCQ



Entry Requirements

- There is no formal entry qualification. This training is of value to those assigned as a company security officer who is responsible for overseeing fleet security and safety.
- This training provides a rapid and comprehensive programme that enables shipping companies to meet the requirements of the ISPS Code with security on board their ships.



Course Outline

- Course introduction
- Maritime Security Policy
- Security Responsibilities
- Ship Security Assessment and On-scene Inspections
- Security Equipment
- Ship Security Plan
- Threat Identification
- Ship Security Actions
- Emergency Preparedness, Drills, and Exercises
- Security Administration
- Security Training

A4 Marine Facility Security Officer



Code: MPF



3 days



Course Scope

1. At the end of the course, the candidate should be able to perform the duties and responsibilities as Marine Facility Security Officer as stipulated in Part A Section 2.1.8 and 17.2 of the ISPS Code, which include but not limited to the following:
 - Conducting an initial comprehensive security survey of the marine facility, taking into account the relevant marine facility security assessment;
 - Ensuring the development and maintenance of the marine facility security plan;
 - Implementing and exercising the marine facility security plan;
 - Undertaking regular security inspections of the marine facility to ensure the continuation of appropriate security measures;
 - Recommending and incorporating, as appropriate, modifications to the port facility security plan in order to correct deficiencies and to update the plan to take into account relevant changes to the marine facility;
 - Enhancing security awareness and vigilance of marine facility personnel;
 - Ensuring that adequate training has been provided to personnel responsible for the security of the marine facility;
 - Reporting to the relevant authorities and maintaining records of occurrences which threaten the security of the port facility;
 - Co-ordinating implementation of the port facility security plan with the appropriate Company Security Officer (CSO) and ship security officer(s) (SSO);
 - Co-ordinating with security services, as appropriate;
 - Ensuring that standards for personnel responsible for security of marine facility are met;
 - Ensuring that security equipment is properly operated, tested, calibrated and maintained, if any; and
 - Assisting SSO in confirming the identity of those seeking to board the ship when requested.



Entry Requirements

1. There are no formal entry qualifications are required. However, in order to interact effectively and derive maximum benefit from this course, the candidates should preferably be persons employed (or to be employed) by a port facility operator and they are likely to be designated as MFSO.
13. Techniques used to circumvent security measures and Methods of physical searches and non-intrusive inspections;
14. Methods of conducting audits, inspection, control and monitoring;
15. Security drills and exercises, including drills and exercises with port facilities; Assessment of security drills and exercises.
16. Crowd Management & Control Technique



Course Outline

1. Course introduction
2. Relevant international and national codes and recommendations;
3. Responsibilities and functions of security organisations
4. Methodology of port facility security assessment
5. Methods of ship and port facility security surveys and inspections and conditions
6. Ship and port facility security measures;
7. Emergency preparedness and response and contingency planning;
8. Instruction techniques for security training and education, including security measures and procedures;
9. Handling sensitive security related information and security related communications;
10. Recognition and detection of weapons, dangerous substances and devices;
11. Recognition of characteristics and behavioural patterns of persons who are likely to threaten security;
12. Security equipment and systems and their operational limitations;



Assessment Methods

1. MCQ

A5 Ship Security Awareness



Code: MPA



1 day



Course Scope

1. At the end of the course, the candidate should have knowledge and understanding as stipulated in Part B Section 13.4 of the ISPS Code and Table A-VI/6-1 of the STCW 2010 Convention, which include but not limited to the following:
 - Contribute to the enhancement of maritime security through heightened awareness;
 - Knowledge of the emergency procedures and contingency plans;
 - Recognition and detection of weapons, dangerous substances and devices;
 - Recognition, on a non-discriminatory basis, of characteristics and behavioural patterns of persons who are likely to threaten security; and
 - Techniques used to circumvent security measures.



Course Outline

1. Course introduction.
2. Relevant International and National Conventions, Codes and Recommendations
3. Security Administration, Responsibilities and Functions of Other Security Organizations;
4. Emergency Preparedness and Response and Contingency Planning
5. Recognition and Detection of Weapons, Dangerous Substances and Devices; and Characteristics and Behavioural Patterns of Persons Who Are Likely to Threaten Security;
6. Ship and Port Facility Security Measures and Techniques Used to Circumvent Security Measures
7. Security Drills, Exercises and Assessment, Including Drills and Exercises with Port Facilities.



Entry Requirements

1. Candidates attending this course will be serving seafarers or other shipboard personnel who will not be assigned specific security duties in connection with the Ship Security Plan.



Assessment Methods

1. MCQ

A6 Person Designated with Security Duties



Code: MSD



1 ½ days



Course Scope

- At the end of the course, the candidate should be able to perform the duties assigned to by Ship Security Officer as stipulated in Part A Section 2.1.6 and 12.2 and acquired knowledge and understanding in Part B Section 13.3 of the ISPS Code and Table A-VI/6-2 of the STCW 1978 Convention as amended (2010), which include but not limited to the following:
 - Knowledge of current security threats and patterns;
 - Recognition and detection of weapons, dangerous substances and devices;
 - Recognition, on a non-discriminatory basis; of characteristics and behavioural patterns of persons who are likely to threaten security;
 - Techniques used to circumvent security measures;
 - Crowd management and control techniques;
 - Security related communication;
 - Knowledge of emergency procedures and contingency plans;
 - Operation of security Equipment and systems;
 - Testing, calibration and at-sea maintenance of security equipment and systems;
 - Inspection, control and monitoring techniques; and
 - Methods of physical searches of persons, personal effects, baggage, cargo, and ship stores.



Entry Requirements

- Candidates attending this course will be serving seafarers or other shipboard personnel and are likely to have designated security duties in connection with the Ship Security Plan.



Course Outline

1. Course introduction & Current Security Threats & Patterns
2. Maritime Security Policy and Relevant international and national codes and recommendations;
3. Security Responsibilities and functions of security organisations
4. Ship Security Assessment and Methods of ship security surveys and inspections
5. Ship and port facility security measures and techniques used to circumvent security measures;
6. Handling sensitive security related information and security related communications;
7. Security Equipment, Recognition and detection of weapons, dangerous substances and devices;
8. Security equipment and systems and their operational limitations; Methods of physical searches and non-intrusive inspections;
9. Threat Identification, Recognition and Response. Recognition of characteristics and behavioural patterns of persons who are likely to threaten security;
10. Ship Security Actions; Actions required by different security levels; Familiarity with the Declaration of Security; Reporting security incidents. Emergency Preparedness and response and contingency planning;
11. Security drills and exercises, including drills and exercises with port facilities; Security Administration; Documentation and records; Assessment of security drills and exercises.



Assessment Methods

1. MCQ

B Shipboard Safety Management



B1 Maritime Accident Investigation & Risk Management



Code: NMIR



3 days



Course Scope

1. The course is developed to provide information to participants to investigate marine accident & incident as defined by the Navigation (Marine Casualty) Regulations of most Flag State. These include:
 - Loss of life or serious injury aboard ship
 - The loss of a ship
 - Fires, collisions, groundings and the disabling of a ship
 - Damage to, or caused by, ships
 - Serious damage to the environment caused by a ship.



Entry Requirements

1. The course is designated for professionally qualified mariners and others concerned with the operational aspects of marine safety. Those entering this course should hold the highest sea-going certificate in the nautical field, the marine engineering field, or other appropriate equivalent qualification and be familiar with the provisions of international safety and pollution prevention conventions and protocols and their means of national implementation by laws, regulations and administrative measures.



Course Outline

1. Fundamental of Investigation
2. International Obligation
3. Analysis of Evidence
4. Quality Management
5. Investigation Techniques
6. Investigation Procedures
7. Report of Investigation
8. Finding & Recommendation
9. Group Activity: Case Studies



Assessment Methods

1. MCQ

B2 Ship Safety Officer



Code: NSSO



3 days



Course Scope

1. Upon the successful completion of the course, the participants will gain in depth knowledge and understanding of the following:
 - Knowledge and understanding of the working of shipboard safety system;
 - Utilization of necessary tools for improving safety;
 - Understand the necessary steps to protect their health onboard;
 - Understand the human factor contribution toward the development of safety culture onboard;
 - Knowledge of the processes required to conduct accident investigation; and
 - Knowledge of the processes required to conduct risk assessment.



Entry Requirements

1. Participants are preferably holding minimum of first certificate of competency, with at least six months of working experience as shipboard officer capacity on deck or engineering department.



Course Outline

1. History of the ISM Code
2. Definitions
3. ISM Clauses
4. Implementation of ISM Code
5. Certification
6. Concept of Effective Risk Management
7. Principle of Risk Assessment
8. Risk Assessment Process
9. Job Safety Analysis
10. Shipboard Safety System
11. Responsibilities, structure, procedures, tools for improving safety
12. Safety checklist, safety inspection and accident prevention
13. Health and hygiene onboard
14. Human factor
15. Safety culture and training



Assessment Methods

1. MCQ

C Shipboard Catering Management



C1 Shipboard Catering Management



Code: MSCMC



5 days



Course Scope

1. Upon successful completion of this course and the course participants should be able to:
 - Manage food and beverages services effectively and efficiently based on rules and regulations on board ship.
 - Provide minimum standard of food and beverage services on board ship.
 - Implement guidelines on inspection, education, research and publication.
 - Implement guidelines on qualified chef, cook and steward.
 - Implement hygienic working procedures in daily job activities.
 - Provide a combination of menu considering a balance diet including food for the sick.
 - Manage the costs/expenses within the budget given.
 - Provide a high quality of food.
 - Apply safety rules and regulations in daily job activities.
 - Apply appropriate storage procedures.
 - Manage accommodation operations effectively and efficiently.
- Ensure clean and healthy living environment to all ship personnel onboard.
- Understand religious requirement and culture practice pertaining to food.



Entry Requirements

1. Serving cook or Chief Cook on board ship or
2. Catering rating who is going to be designated as cook and
3. All trainees must possess at least 12 months working experience in Catering Department.



Course Outline

1. Food Safety.
2. National and International Codes and Conventions.
3. Food Safety Hazards.
4. Refrigeration, chilling and cold holding of foods.
5. Cooking, hot holding and re-heating of foods.
6. Food handlers.
7. Principles of safe food storage.
8. Cleaning and Sanitizing.
9. Food premises and equipment.
10. Nutrition.
11. Cost Control.
12. Handling kitchen equipment and food ingredients.
13. Accommodation, recreational facilities, food and catering.



Assessment Methods

1. MCQ

D Training Of Trainers



D1 Training of Trainers

IMO 3.12



Code: TOT 3.12



10 days



Course Scope

1. Upon learning the course, the trainees should be able to meet the requirements as specified in sections A-I/6, A-I/8 and guidance contained in sections B-I/6, B-I/8 of the STCW Code.
2. It includes the international provisions concerning the training, assessment, examination and certification. To evaluate, apply and analyze the processes necessary, determine appropriate assessment methods, organize, administer and conduct assessments/examinations including demonstrate the ability to issue certificates and control the certification process.
3. Those who are to conduct assessments/ examinations for issue of certificates as master, C/E, deck or engineering officer, such experience should preferably include service as master or C/O, as appropriate.
4. A refresher course in the theoretical aspects of the discipline concerned may be necessary for those persons whose recent experience has been mostly of a practical nature. Similarly, a refresher course in the practical aspects of the discipline concerned may be necessary for those persons whose recent experience has been mostly of a theoretical nature. Other qualification may be recognized as equivalent.
5. Fluency in both spoken and written language in which the course will be conducted is essential.



Entry Requirements

1. Person to be trained to conduct assessments and examinations for COC issued under international instruments dealing with certification of persons to be employed aboard ship should hold a COC no lower
5. Fluency in both spoken and written language in which the course will be conducted is essential.



Course Outline

1. The STCW Convention, 1978 as amended
2. Quality System
3. Assessing Applications
4. Requirements in Training and Assessment
5. Approving Training, Assessment and Records
6. Competence-Based Standards
7. Developing Written Tests
8. Invigilation of Tests
9. Scoring Tests
10. Oral and Practical Tests
11. Shipboard Assessment
12. Maintenance of Standards
13. Administration
14. Course review and practical evaluation activity



Assessment Methods

1. MCQ and Presentation

D2 Training of Trainers

IMO 6.09



Code: TOT 6.09



8 days



Course Scope

1. The scope of this course is to include the planning and preparation of effective teaching and instruction, the selection of appropriate methods of instruction and preparation of teaching materials, and the evaluation of the teaching and learning process.



Entry Requirements

1. Trainee instructors wishing to deliver training in the competence standards required by STCW Convention should already have the necessary technical knowledge and be qualified in the task for which training is to be conducted.
2. This course assumes that the trainee instructors are appropriately qualified in the technical aspects of their subjects. It would also be useful if at least some of the group of trainee instructors have had some experience of training others.



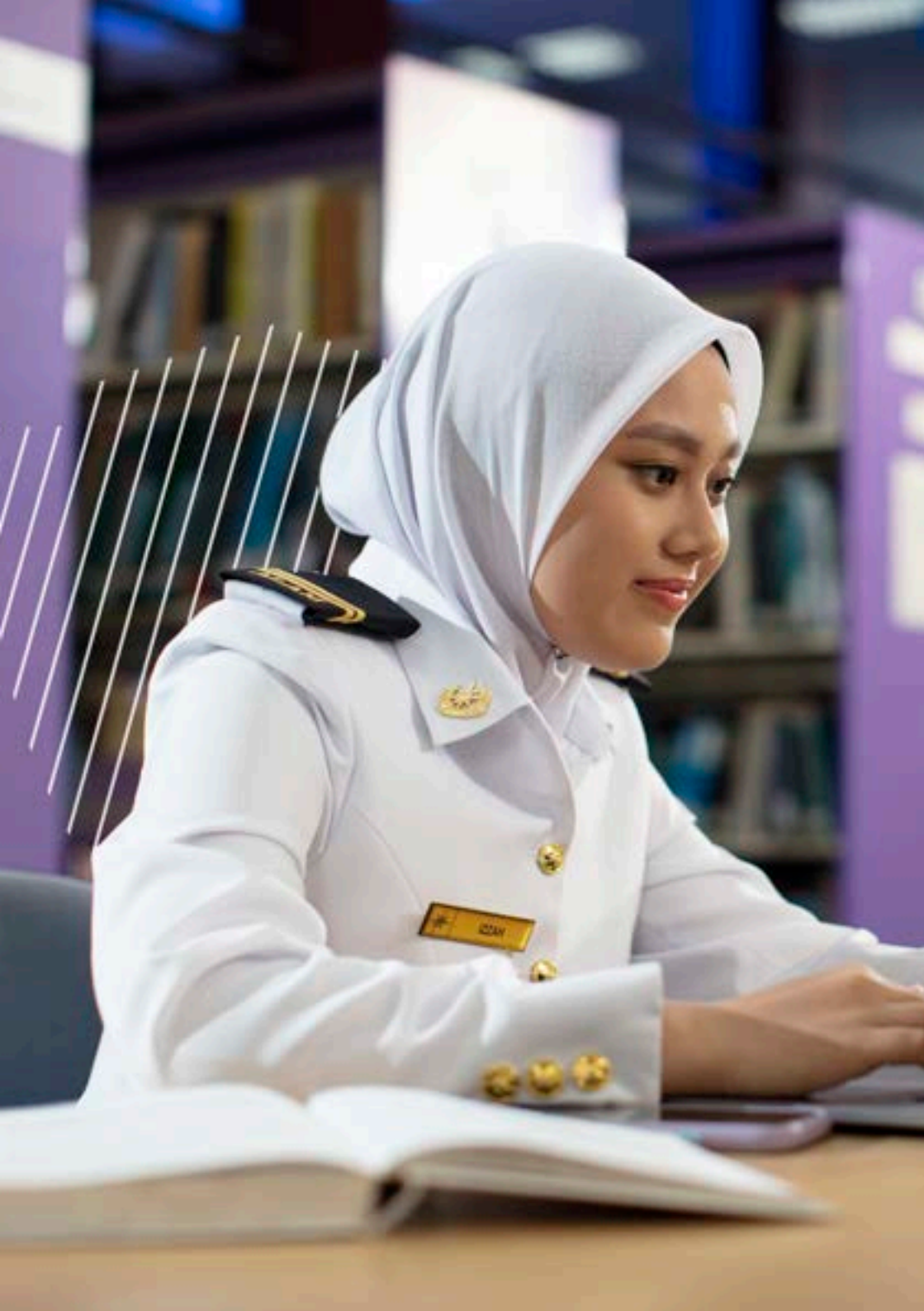
Course Outline

1. Understand and describe how STCW 1978, as amended (STCW 2010) requires competence-based training Shipboard personnel management and training
2. Plan an effective teaching environment
3. Use a range of teaching methods effectively
4. Use appropriate training aids
5. Produce a relevant lesson plan
6. Evaluate teaching and learning
7. Design a course of study



Assessment Methods

1. MCQ and Presentation



PROGRAMMES OFFERED BY

**PRE SEA MARINE
ENGINEERING
DEPARTMENT**



A Engineering Short Courses



A1 Marine Engineer Officer Watchkeeping Oral Preparatory Course (Motor Steam)



Code: AMEW (M/S)



5 days



Course Scope

1. The course is designed to provide the students with the knowledge, understanding and skill necessary to prepare him for the Watchkeeper Certificate of Competency (Motor/ Steam) oral examination at the Marine Department, Malaysia.



Entry Requirements

1. A Diploma/Degree in Marine Engineering or have undergone a training course approved by the Director of Marine, Malaysia
2. A valid Seaman Identification Card
3. A valid Certificate of Competency
4. Sea service period as required.
5. A valid medical certificate by Marine Department Approved practitioners.

The Course is currently applied to Malaysia's COC holder only.



Course Outline

1. Watchkeeping
2. Taking Over a Watch
3. Duties Undertaken During a Watch
4. Handing Over a Watch
5. Operation of Machineries
6. Preparation for Sea of Main and Auxiliary Machinery
7. Procedures for Testing of Main and Auxiliary Machinery
8. Pumping Operation
9. Operation of Auxiliary Boiler
10. Alternators
11. Common Faults in Main Machine Plant
12. Safety
13. Safe Isolation and Operation of Electrical and Other Plants
14. Boiler and Associated Steam Plant
15. Steering Gear System
16. Refrigerated Machinery and Compartment
17. Hydraulic and Pneumatic System and Equipment
18. Machinery in General
19. Safety Equipment



Assessment Methods

1. An assessment scheme will be carried out to monitor the progress of the students throughout the course.
2. A student's performance and progress throughout the course will be closely monitored and gauged in order to achieve the education and training objectives in accordance to the relevant requirements specified in Table A-III/1 the STCW 78 (as amended in 2010).
3. A mock oral examination will be conducted.



The background of the image shows the interior of a ship's engine room. It features a large, complex piece of machinery, likely a diesel engine, with various pipes, valves, and electrical components. The lighting is somewhat dim, and the overall color palette is dominated by the blue overlay. A horizontal line is positioned below the text "PROGRAMMES OFFERED BY".

PROGRAMMES OFFERED BY

POST SEA MARINE ENGINEERING DEPARTMENT

B Engineering Short Courses



B1 High Voltage Course

Operation & Management



Code: NHVOM



4 days



Course Scope

1. The aim of the course is to enable participants to acquire knowledge, understanding and proficiency in high voltage safety, power generation, distribution, utilization. This includes high voltage operation and maintenance for equipment found on HV vessels.
2. The course addresses the requirements of knowledge, understanding and proficiency on HV equipment at operational, and management levels as identified under Function: Electrical, electronic and control engineering, tabulated in Tables A-III/1 (in part relevant to HV), A-III/2 (in part relevant to HV), A-III/3 (in part relevant to HV), and A-III/6 (in part relevant to HV) of the International Convention on Standard of Training, Certification and Watchkeeping for Seafarers 1978, as amended.
3. The course aims to enhance the working knowledge on HV equipment and may not be considered mandatory for competency certification.



Entry Requirements

1. This course is intended for seafarers (engine/electrical) having at least 12 months approved seagoing service in total during the preceding 60 months on board ships, marine crafts and offshore installations.

Note: Participants must provide proof of sea time (Continuous Discharge Book extracts), Identification (Seamanship card) and must be physically and mentally fit for sea service.



Course Outline

1. Generator & Power Distribution
 - HV Generator Construction
 - Excitation System
 - HV Power Distribution System
 - Routine Test
2. H.V. Testing
 - Periodic Maintenance
 - Condition Based Maintenance
 - HIPOT Test
 - Insulation Resistance Test
 - Polarization Index test
 - Contact Resistance Test
3. H.V. Switching
 - Safety Regulation
 - PPE
 - Permit to Work
 - Authorization
 - Tagging and Locking
 - Isolation & Switching Procedure
 - Shutdown and Normalizing a Marine Distribution Power Transformer
 - Switching and Synchronization & Exercise
 - Scenario Handling
 - Post Test



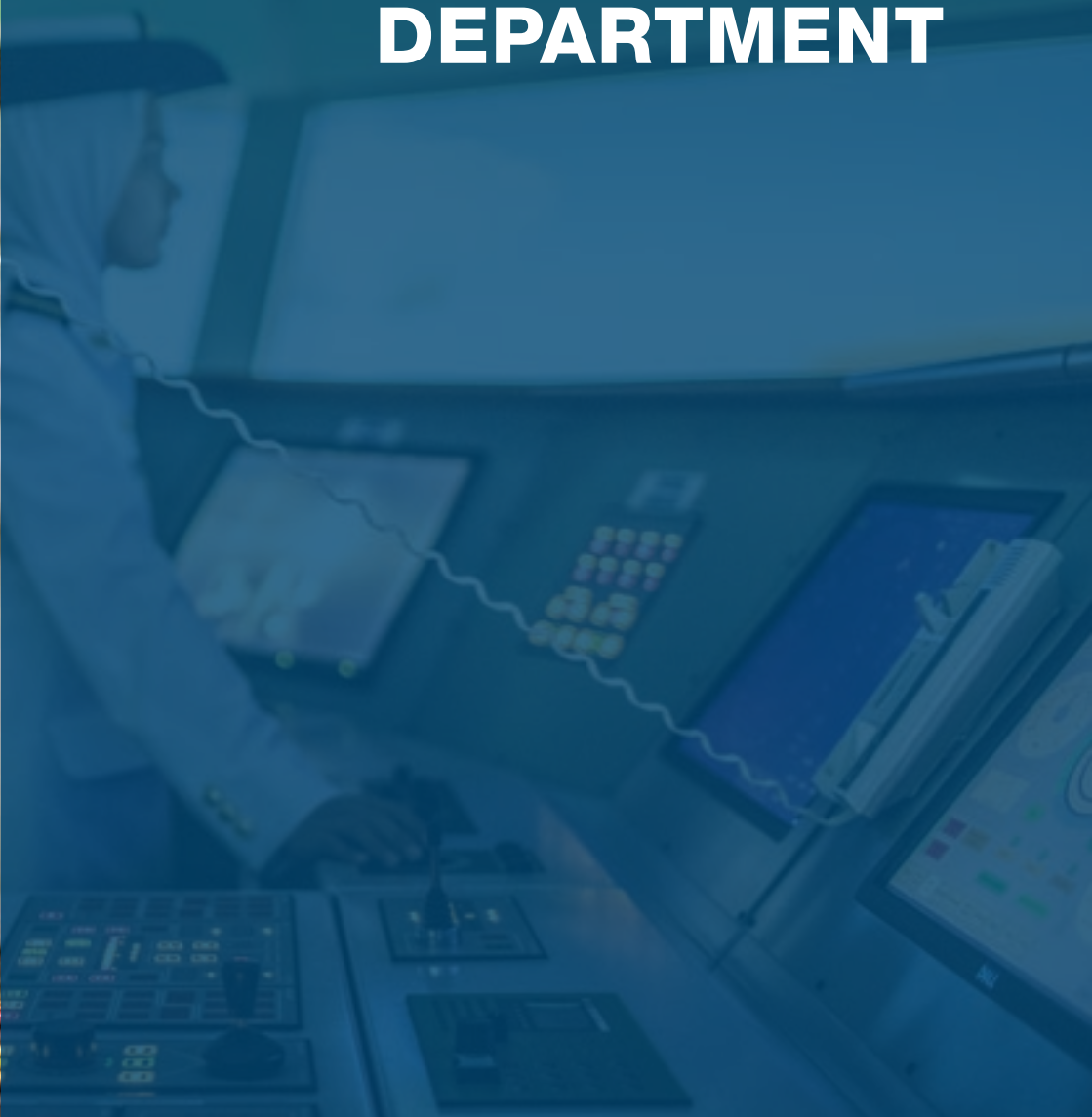
Assessment Methods

1. An assessment will be carried out on completion of the course.
2. There will be a pre-test assessment to gauge the knowledge level of the participants and post-course assessment to analyze the understanding.



PROGRAMMES OFFERED BY

SIMULATION DEPARTMENT



A Simulator Programmes



A1 Ship Handling Manoeuvring Course (Operational Level)



Code: NSHO



4 days



Course Scope

1. This is essentially a practical course and consists mainly of a series of exercises performed on a ship-handling simulator. Some classroom lectures, provide the necessary theoretical background for the exercises, are included. Particular items dealt with in these lectures are illustrated either by including them as part of an exercise or by a separate simulator demonstration.
2. Exercises are controlled by an instructor and, initially, allow the trainees to become familiar with the equipment, the controls, and the instrumentation provided by the simulator.
3. The exercises increase in complexity as the course progresses and as trainees become familiar with the manoeuvring characteristics of the ship model and its response to the engine and helm in various conditions. Equipment failure or malfunction may be introduced during an exercise to afford trainees practice in taking emergency remedial action.
4. During exercises, trainees are expected to make use of effective bridge procedures, to comply with the International Regulations for Preventing Collisions at Sea, 1972 (COLREG 1972) and to observe the basic principles of keeping a navigational watch and ship handling as set out in Part A chapter 2 Section A-11/1 and B Section V111/1 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 as amended in 2010. They will assume the different roles of the bridge watchkeeping team, the roles being rotated to allow each trainee an opportunity to act as the master for some of the exercises.
5. Each exercise will be preceded by a session for briefing and planning and be followed by a group discussion led by the instructor to analyse the actions and decisions of the trainees.



Entry Requirements

1. Trainees wishing to enter this course should have a minimum of six months of watchkeeping experience as an officer in charge of a navigational watch or as decided by the sponsor.



Course Outline

1. Course Introduction
2. Simulation Training
3. CBT – Principles of Ship Handling
4. CBT – MCQ Test
5. Summary & Course Evaluation

A2 Ship Handling Manoeuvring Course (Management Level)



Code: NSHM



4 days



Course Scope

1. This is essentially a practical course and consists mainly of a series of exercises performed on a ship-handling simulator. Some classroom lectures, provide the necessary theoretical background for the exercises, are included. Items dealt with in these lectures are illustrated either by including them as part of an exercise or by a separate simulator demonstration.
2. Exercises are controlled by an instructor and, initially, allow the trainees to become familiar with the equipment, the controls, and the instrumentation provided by the simulator.
3. The exercises increase in complexity as the course progresses and as trainees become familiar with the manoeuvring characteristics of the ship model and its response to the engine and helm in various conditions. Equipment failure or malfunction may be introduced during an exercise to afford trainees practice in taking emergency remedial action.
4. During exercises, trainees are expected to make use of effective bridge procedures, to comply with the International Regulations for Preventing Collisions at Sea, 1972 (COLREG 1972) and to observe the basic principles of keeping a navigational watch, Part A chapter 2 section A-II/2 and Part B-VIII/2 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amend STCW 2010. They will assume the different roles of the bridge watchkeeping team, the roles being rotated to allow each trainee an opportunity to act as the master for some of the exercises.
5. Each exercise will be preceded by a session for briefing and planning and be followed by a group discussion led by the instructor to analyse the actions and decisions of the trainees.



Entry Requirements

1. Trainees wishing to enter this course should have ALAM approved "Ship handling Manoeuvring Course (Operational Level) Certificate or as decided by the sponsor.



Course Outline

1. Course Introduction
2. Simulation Training
3. Videos
4. Summary & Course Evaluation

A3 Senior Officers

Leadership Assessment Programme for Deck Officers



Code: SOLAP



3 days



Course Scope

1. The SOLAP is specifically designed to assist companies in assessing the suitability of Senior Deck Officers for assuming the position of Shipmasters.
2. This command assessment/ leadership programme focuses on the assessment of generic leadership competencies and does not include an assessment of professional/ technical competencies.
3. This course is to be co-conducted by an experienced ex-Shipmaster together with a qualified Psychologist who specializes in “Organizational Psychology.”

(FG) and have completed the Bridge Resource Management (BRM) (also known as MRM, MCRM) course or as mutually agreed by ALAM and the sponsor company.



Course Outline

1. Course Introduction
2. Psychological Assessment (Psychometric Test)
3. Full Mission Ship Handling Simulator (FMSHS) Familiarization
4. Ship Command Training/Assessment
5. Psychological Assessment - Individual Report
6. Ship Master – Good Attributes
7. Summary & Course Evaluation



Entry Requirements

1. Trainees wishing to enter this course should have a valid Class 1 Deck Officer Certificate of Competency

A4 Bridge Resource Management (BRM) Course



Code: MBRM



4 days



Course Scope

1. The BRM Course focuses on imparting officers with the knowledge on the use/coordination of own/ others Attitude, Skills, Knowledge, Experiences and Resources (including but not limited to Manpower, Systems, Equipment & Information) available to oneself + Bridge Team to accomplish or achieve the operation's established goals without jeopardizing HSSE Assurance



Entry Requirements

1. Merchant or naval deck officers and engineers, maritime pilots or as decided by the sponsor.



Course Outline

1. Introduction - importance of BRM
2. Human Performance & Limitation Attitudes
3. Attitudes
4. Situational Awareness
5. Cultural Awareness
6. Communications & Briefings
7. Authority & Assertiveness
8. Challenge & Response
9. Short Term Strategy
10. Workload
11. Humans & Automation
12. Team State
13. Error Management
14. Leadership Styles
15. Decision Making
16. Crisis (Emergency) Management
17. Crowd (Crew) Management
18. Critical Incident Debriefing
19. Merchant Shipping Industry's undesired events statistics/trend

A5 Ship Handling for VLCC



Code: NVLC



2 days



Course Scope

1. The BRM This is essentially a practical course and consists mainly of a series of exercises performed on a ship-handling simulator.
2. Some Computer Based Training (CBT), which provide the necessary theoretical background for the exercises, are included.
3. Exercises are controlled by an instructor and initially allow the trainees to become familiar with the bridge equipment, controls, and instrumentations available at Full Mission Ship Handling Simulator bridges.
4. The exercises are increased in complexity as the course progresses and as trainees become familiar with the bridge and understand better the typical manoeuvring characteristics of a ship model in relation to the engine and helm in various conditions.
5. Equipment failure or malfunction may be introduced during an exercise to enable trainees to practice in taking emergency remedial action.
6. During exercises, trainees are expected to make use of effective bridge procedures/industry best practices, to comply with the International Regulations for Preventing Collisions at Sea, 1972 (COLREG 1972, including 2003 amendments) and to observe Resolution A.960 (23) – Annex 2: Recommendation On Operational Procedures for Maritime Pilots Other Than Deep-Sea Pilots. Candidates must be able to make use of relevant local regulations pertaining to pilotage.
7. Each CBT or Simulation Training will be preceded by a briefing (and if required planning) led by the instructor.
8. Post CBT or Simulation Training, there will be a group discussion led by the instructor to further strengthen important points and/or analyse the actions and decisions made by the trainees.



Entry Requirements

1. As decided by the sponsor.



Course Outline

1. Course Introduction
2. Ship handling VLCC theories
3. Simulation Training
4. CBTs – Principles of Ship Handling
5. Ship Stability
6. Port – ERP: Marine Pilots – R & R
7. MCQ Test
8. Summary & Course Evaluation

A6 Ship to Ship Transfer (STS) & Ship by Side (SBS Operations Ship Handling Manoeuvring Course



Code: MLSTS



4 days



Course Scope

1. This is essentially a practical course and consists mainly of a series of exercises related to Ship to Ship Transfer (STS – LNGC to LNGC) and Ship by Side (SBS – LNGC to FLNG) Operations Ship Handling (manoeuvres) performed on a Full Mission Ship-Handling Simulator (FMSHS).
2. Exercises are controlled by an instructor and, initially, allow the trainees to become familiar with the ship (bridge) equipment, the controls, and the instrumentation available at/ provided by the FMSHS.
3. The exercises increase in complexity as the course progresses and as trainees become familiar with the manoeuvring characteristics of the ship model and its response to the engine and helm in various conditions.
4. During exercises, trainees are expected to make reference to/practice the available latest MISC Berhad STS/SBS guidelines, procedures, etc., Society of International Gas Tankers and Terminals Operators (SIGTTO) – LNG STS guidelines and other industry best practices, including the Oil Companies International Marine Forum (OCIMF) – Ship to Ship Transfer Guide (Petroleum).
5. Each exercise will be preceded by a session for briefing and planning and be followed by a group discussion led by the instructor to analyse the actions and decisions of the trainees.



Entry Requirements

1. As decided by MISC Berhad.



Course Outline

1. LNGC STS/SBS Operations -
References
2. Simulator Familiarization
3. Simulation Training (Normal Ops)
4. Simulation Training (Emergency Ops)
5. Course Summary & Evaluation

A7 Offshore Vessel Manoeuvring Course



Code: MOSV



3 days



Course Scope

1. is essentially a practical course and consists mainly of a series of exercises performed on a ship-handling simulator. Some classroom lectures are included to provide the necessary theoretical background for the exercises. Topics in these lectures are illustrated either by including them as part of an exercise or by a separate simulator demonstration.
2. Exercises are initially controlled by an instructor to allow the participants to become familiar with the equipment, the controls, and the instrumentation provided by the simulator.
3. The exercises increase in complexity as the course progresses as participants become familiar with the manoeuvring characteristics of the ship model and its response to the engine and helm in various conditions. Equipment failure or malfunction will be introduced during an exercise to afford participants practice in taking emergency remedial action.
4. Each exercise will be preceded by a

session for briefing and planning and be followed by a group discussion led by the instructor to analyse the actions and decisions of the participants.



Entry Requirements

1. There is no entry requirement for this course.



Course Outline

1. Controllable Effects
2. Un-controllable Effects
3. Familiarization with the Bridge
4. Seamanship
5. Manoeuvring
6. Written Test
7. Course evaluation

A8 Engine Room Resource Management Course



Code: MERM



4 days



Course Scope

1. The Engine Room Resource Management Course with Simulation focuses on imparting officers with the knowledge on the use/ coordination of own/others Attitude, Skills, Knowledge, Experiences and Resources (including but not limited to Manpower, Systems, Equipment & Information) available to oneself and the Engine Room Team to accomplish or achieve the operation's established goals without jeopardizing Health, Safety, Security and Environment (HSSE) Assurance.
2. This course complies with the STCW 2010 convention, including Code A-III/1, III/2, and Code B -III/1, III//2 of the convention covering areas on Engine Room Resource Management. This course also utilizes a Full Mission Engine Room Simulator to understand and apply the ERM topics covered.



Entry Requirements

1. Entry to the course is open to all candidate that has performed, during the required seagoing service, engine room watchkeeping duties under the supervision of the chief engineer officer or a qualified engineer officer for a period of not less than 6 months



Course Outline

1. ERM – Introduction
2. CBT- The Human Elements
3. CBT- Communications
4. CBT- The Team
5. CBT- Management & Leadership
6. CBT – Crisis Management
7. Simulation
8. ERM (MCQ) Test
9. Course Evaluation

A9 Senior Engineers Leadership Attainment Programme for Marine Engineers



Code: SELAP



3 days



Course Scope

1. The SELAP is specifically designed to assist companies in developing and assessing the suitability of Senior Marine Engineer Officers for assuming the position of Chief / Second Engineer.
2. This command programme focuses on the development and assessment of generic leadership competencies and does not include an assessment of professional/technical competencies.
3. This course is to be co-conducted by an experienced ex-Chief Engineer together with a qualified Psychologist who specializes in “Organizational Psychology”/a qualified Human Resource Development Specialist who specializes in “Organization Behaviours Development” and holds a Masters/PhD in Human Resource Development.
4. As opposed to the word ‘assessment’ (without development), the word ‘attainment’ reflects the spirit of continuous improvement with an end goal of accomplishment in mind – the continuous act of attaining the goal of being an effective leader.
5. It gives the clients and the programme participants the sense of vigour and vitality of looking at leadership from a new dimension and perspective and the desire to attain a new level of effectiveness as opposed to the word assessment.



Entry Requirements

1. Trainees wishing to enter this course should have a valid Class 1 Chief Engineer Certificate of Competency (FG) and have completed the Engine Resource Management (ERM) (also known as MRM, MCRM) course or as mutually agreed by ALAM and the sponsor company.



Course Outline

1. Course Introduction
2. Leadership Psychological Awareness Exercise
3. Full Mission Engine Room
4. Simulator (FMERS)
5. Familiarization
6. Engine Room Command
7. Training/Assessment
8. Psychological Individual Report Interpretation & Consultation
9. Chief Engineer – Good Attributes
10. Summary & Course
11. Evaluation

A10 Radar Navigation & Plotting Course



Code: MRN



10 days



Course Scope

1. The course provides training in the basic theory and the use of radar for officers in charge of a navigational watch. It is based on the guidance on training in radar observation and plotting in Section B-1/12 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 2010. This course meets the mandatory minimum requirements for knowledge, understanding and proficiency in Table A-II/1 of STCW 2010.
2. The aspects covered include the theory necessary to understand how radar information is obtained and displayed, the limitations and accuracy of that information, the formation and recognition of unwanted responses, the correct use of operational controls to obtain an optimal display, and checks on the performance of the set.
3. The various modes of display available and the choice of a suitable mode for a particular application are covered, together with the effect that changes in the course or speed of “own” or target ship have the appearance of the display. The course also covers the recognition of critical targets, the measurement of bearings and distances, and the use of these for fixing the ship’s position and maintaining a plot of the movement of other ships as an aid to collision avoidance.
4. Exercises in the application of the International Regulations for Preventing Collisions at Sea (COLREGS) make use of the resulting plots.



Entry Requirements

1. This course is principally intended for candidates for certification as officers in charge of a navigational watch. Before entering the course, trainees should have completed a minimum period of six months at sea and preferably have gained some experience of bridge watchkeeping.
2. Trainee officers for certification as an officer in charge of a navigation watch should have completed or followed a planned and structured training programme. Shipboard training should include tasks or projects relating to bridgework and watchkeeping duties. Instructors may find evidence of the standard attained by trainees in the prospective officer's training record book.
3. The course would also be of value to others using radar, e.g., those working in such craft as harbour and customs patrol launches, in which case the entry standards may be adjusted to suit the particular circumstances. However, the intake of trainees for each course should normally have similar backgrounds.



Course Outline

1. Course Introduction
2. Set up and Operate Radar in Accordance with Manufacturer's Instructions
3. Perform Manual Radar Plotting
4. Use Radar to Ensure Safe Navigation
5. Use Radar to Avoid Collisions or Close Encounters
6. Assessment (Theory/Practical/Oral)

A11 Electronic Navigational Aids (ENA) Course



Code: MNA



10 days



Course Scope

1. The course provides education and training to meet the standard of competence as specified in Section A-II/1 of the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW Code) 1978, as amended in 1995.
2. This course is for Officers in charge of a navigational watch on ships of 500 gross tonnages or more. It fulfills the training requirements on navigation at the operational level for competence in planning, conducting a passage, and determining position.
3. The course is to equip the trainee officer with the fundamental knowledge and skills required to operate Electronic Navigational Aids commonly fitted on ships and to use the information presented to undertake the duties of a safe navigational watch. (References are also made from (Module 3 & Module 4) of IMO Model Course 7.03).



Entry Requirements

1. Each course participant must produce evidence of a minimum of 6 months sea service in an acceptable deck capacity.



Course Outline

1. Course Introduction
2. ENA Lessons
3. ENA Simulation Training
4. ENA Theory Examination
5. Summary & Course Evaluation

A12 ARPA (Operation) Course



Code: MAR



5 days



Course Scope

1. The course provides training in the basic theory and the use of automatic radar plotting aids for officers in charge of a navigational watch on vessels equipped with ARPA. It is based on the guidance on training in the operational use of ARPA in Section B-I/12 of the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers, 1978, as amended in 1995 (STCW 1995). This course aims to meet the minimum training standards for Automatic Radar Plotting Aids (ARPA) in Table A-II/1 of STCW 95.



Entry Requirements

1. This course is for candidates for certification as officers in charge of a navigational watch performing the function of navigation at the operational level on ships of 500 gross tonnages or more.

2. A minimum period of one year at sea and preferably have gained some experience of bridge watchkeeping and should have completed a certified course of Radar Navigation and Radar Plotting training.



Course Outline

1. Describe an ARPA system
2. Course briefing and introduction
3. ARPA system display characteristics
4. IMO performance standards for ARPA
5. Acquisition of targets
6. Tracking capabilities and limitations
7. Processing delays
8. Operate an ARPA System
9. Set up and maintain an ARPA display
10. Obtain target information
11. Errors of interpretation of target data
12. Errors in displayed data identified and explained
13. System operational tests to determine data accuracy
14. Risks of over-reliance on ARPA
15. Obtain information from ARPA displays
16. Application of COLREGS

A13 RADAR, ARPA, Bridge Teamwork & Search and Rescue Course for Management Level



Code: MRAS



5 days



Course Scope

1. The course is to provide education and training to meet the standard of competence as specified in Section A-II/2 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW Code) 1978, as amended in 1995.
2. It is designed to satisfy the requirements on the function of navigation at the management level on the standard of competence in maintaining safe navigation using Radar/ARPA and modern navigation systems to assist command decision-making. This course is for masters and Chief Mates on ships of 500 gross tons or more. The course is essentially practical and consists of a series of exercises performed on a radar/ARPA simulator with two or more "own ships" and a few others controlled by the instructor. Each exercise will involve observing the movement of ships seen on the radar, recognizing those presenting a threat of collision, and taking action to avoid collisions. Participants will act either as master or as an observing officer for the exercises and will change roles to allow each turn to command their "own ship".
3. As the course progresses, exercises of increasing complexity will be set to provide realistic practice in the use of radar and ARPA for navigation and collision avoidance in confined waters with heavy traffic.
4. Each exercise will be followed by a class discussion, providing participants the opportunity to analyse the actions taken and discuss possible alternatives.



Entry Requirements

1. Holders of certificates satisfy the requirements of regulation II/1 or 11/3 of the 1995 Amendments to 1978 STCW Convention as an officer in charge of a navigational watch.
2. They should also have completed 12 months of bridge watch-keeping duties.



Course Outline

1. Course Introduction
2. Radar/ARPA Lessons
3. Simulation Training
4. Summary & Course Evaluation

A14 GMDSS General Operators Certificate Course



Code: MDSS(G)



10 days



Course Scope

1. The course covers the training to meet the mandatory requirements for certification of GMDSS radio personnel as detailed in Section A-IV/2 of the International Convention of Standards of Training, Certification, and Watchkeeping of Seafarers, 1978 as amended in 1995 and the requirements of ITU Regulations.



Course Outline

1. Introduction
2. Principles of maritime radio-communications
3. GMDSS communication systems
4. Other GMDSS equipment
5. Distress alerting
6. Skills and operational procedures for general communications
7. Assessment and discussion



Entry Requirements

1. This course is open primarily to seafarers who are qualified navigating officers or are studying for such qualification and have thus obtained relevant knowledge of basic electricity, electronics, the English language, and specific maritime subjects, such as search and rescue and radio navigation.
2. Participants must not be less than 18 years of age, must be physically fit.

A15 GMDSS Restricted Operators Certificate Course



Code: MDSS(R)



5 days



Course Scope

1. The course covers the training recommendation in annex 4 to IMO Assembly resolution A.703(17) – Recommendation on the training of Radio Operators related to the Restricted Operator's Certificate (ROC).



Entry Requirements

1. The course framework assumes little knowledge of maritime radio communication practice but a working knowledge of English as a second language. It is assumed in developing the timetable for this course that the compendium or similar material will be made available for study before the commencement of the course.



Course Outline

1. Introduction
2. Principles of Maritime Radio communications
3. GMDSS communication systems
4. Other GMDSS equipment
5. Distress alerting
6. Miscellaneous skills and operational procedures for general communications
7. Assessment and discussion

A16 GMDSS General Operators Certificate (Revalidation) Course



Code: MDSS(CGR)



1 day



Course Scope

1. The course covers the training to meet the mandatory requirements for certification of GMDSS radio personnel as detailed in Section A-IV/2 of the International Convention of Standards of Training, Certification, and Watchkeeping of Seafarers, 1978 as amended in 1995 (STCW95) and the requirements of ITU Regulations.



Course Outline

1. Global Maritime Distress and Safety System
2. Review of DSC procedures
3. Review of Inmarsat Operating procedures.
4. Distress Alerting
5. Obligatory procedures and practices



Entry Requirements

1. Participants must be holders of a recognized GMDSS General Operator Certificate whose validity has expired or about to expire.

A17 GMDSS Restricted Operators Certificate (Revalidation) Course



Code: MDSS(CRR)



1 day



Course Scope

1. The course covers the training to meet the mandatory requirements for certification of GMDSS radio personnel as detailed in Section A-IV/2 of the International Convention of Standards of Training, Certification, and Watchkeeping of Seafarers, 1978 as amended in 1995 (STCW95) and the requirements of ITU Regulations.



Course Outline

1. Review of Global Maritime Distress and Safety System
2. Review of GMDSS DUS Procedures Mitigation of False Distress Alerts
3. Application of GMDSS
4. Abandoning of ship
5. Man Overboard
6. Fire on Board



Entry Requirements

1. Participants must be holders of a recognized GMDSS Restricted Operator Certificate whose validity has expired or about to expire.

A18 Electronic Chart Display & Information System (ECDIS) Course



Code: MCI



5 days



Course Scope

1. This course provides training in the basic theory and use of Electronic Chart Display and Information Systems (ECDIS) for those who will oversee a navigational watch on vessels equipped with ECDIS. The training comprises all safety-relevant aspects and aims beyond the use of operational controls. Because ECDIS systems and MMIs are in an ongoing process of evolution, a functional approach, not a product-oriented approach, is aimed at. As ECDIS is part of a complex system (including sensors, track control, etc.) complex training based on various functionalities and potential problems are promoted.
2. The theoretical aspects like all major characteristics of ECDIS data such as data contents and all major characteristics of the display of ECDIS data will be covered in sufficient depth.
3. For practical capabilities and skills, exercises are performed which will provide practice in setting up and maintaining an ECDIS display, in planning and monitoring a route, in using basic navigational functions and equipment in a real-time navigational environment, in activating updates, and in performing proper actions which are necessary for a safe navigational watch.



Entry Requirements

1. The course is designated both for candidates for certification as officers in charge of a navigational watch and for experienced nautical officers and other persons with responsible duties in navigation work, such as pilots.
2. Those wishing to enter this course should have experience in performing chart work and should be able to practise all usual tasks concerning standard navigational procedures and equipment. They should know about the functions and limitations of other navigational equipment.
3. They should preferably be familiar with standard computer MMIs, including elements such as windows, menus, trackball, etc.



Course Outline

1. Review of Global Maritime Distress and Safety System
2. Review of GMDSS DUS Procedures Mitigation of False Distress Alerts
3. Application of GMDSS
4. Abandoning of ship
5. Man Overboard
6. Fire on Board

A19 ECDIS MFD Brand Specific



Code: MCI



5 days



Course Scope

1. This course provides the knowledge, skill, and understanding of JRC ECDIS MFD and electronic charts to the thorough extent to safely navigate vessels whose primary means of navigation is ECDIS. The course emphasizes both the application and learning of ECDIS in a variety of underway contexts.
2. The course is designed to meet the STCW requirements in the use of ECDIS as revised by the 2010 Manila Amendments, specifically as these apply to Table A-II/1, A-II/2 and A-II/3 and also to revised guidelines pertaining to training and assessment in the operational use of ECDIS in Table B-I (paragraphs 36 through 66), assessment in navigational watchkeeping and evaluation of competence, both in Table B-II.
3. It should be understood that this is a type-specific course that requires a structured and complimentary onboard ship-specific ECDIS familiarization for each shipboard ECDIS system on which the navigating officer serves.



Entry Requirements

1. The candidate must have an ECDIS certificate (generic training) and an NJRCE certificate.
2. It is assumed that trainees undertaking this course have accomplished some formal instruction in Terrestrial Navigation, have minimum some familiarization with visual navigation, have accomplished a period of supervised bridge watch-keeping duties and have prior completion of basic Radar/ARPA (MC 1.07). Trainees should also have considerable familiarization with personal computing operating systems, keyboards and mice or trackballs.



Course Outline

1. Description of the configuration of Software
2. Description of the Display panel
3. Route Planning and Monitoring
4. Setting of ECDIS
5. Chart Installation and Updating

A20 JRC ECDIS Brand Specific



Code: NJRCE



2 days



Course Scope

1. This course provides the knowledge, skill, and understanding of JRC ECDIS and electronic charts to the thorough extent to safely navigate vessels whose primary means of navigation is ECDIS. The course emphasizes both the application and learning of ECDIS in a variety of underway contexts.
2. The course is designed to meet the STCW requirements in the use of ECDIS as revised by the 2010 Manila Amendments, specifically as these apply to Table A-II/1, A-II/2 and A-II/3 and also to revised guidelines pertaining to training and assessment in the operational use of ECDIS in Table B-I (paragraphs 36 through 66), assessment in navigational watchkeeping and evaluation of competence, both in Table B-II.
3. It should be understood that this is a type-specific course that requires a structured and complimentary onboard ship-specific ECDIS familiarization for each shipboard ECDIS system on which the navigating officer serves.



Entry Requirements

1. Candidate must have ECDIS certificate (generic training)
2. It is assumed that trainees undertaking this course have accomplished some formal instruction in Terrestrial Navigation, have minimum some familiarization with visual navigation, have accomplished a period of supervised bridge watch-keeping duties and have prior completion of basic Radar/ARPA (MC 1.07). Trainees should also have considerable familiarization with personal computing operating systems, keyboards, and mice or trackballs.



Course Outline

1. Description of the configuration of Software
2. Description of the Display panel
3. Route Planning and Monitoring
4. Setting of ECDIS
5. Chart Installation and Updating

A21 Radar Operator Course



Code: MRP



5 days



Course Scope

1. The course provides training in the theory and the use of radar for Domestic ships of 500 gross tonnages or less and fulfills the training requirements on the use of Radar as detailed in Section A-II/4 of the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW Code) 1978 as amended in 1995.



Course Outline

1. Describe the Basic Theory and Operation of a marine Radar System
2. Set-Up and Operate Radar in Accordance with Manufacturer's Instructions
3. Perform Manual Radar Plotting
4. Use Radar to Ensure Safe Navigation
5. Use Radar to Avoid Collisions or Close Encounters



Entry Requirements

1. Before entering the course, trainees should have completed a minimum period of one year at sea in the Navigation Department and have gained some experience of bridge watchkeeping.

A22 RADAR & ARPA

Refresher Simulator Course



Code: NRAR



2 days



Course Scope

1. It is designed to refresh the requirements on the function of navigation at the management level on the standard of competence in maintaining safe navigation using Radar/ARPA and modern navigation systems to assist command decision-making. The course is essentially practical and consists of a series of exercises performed on a radar/ARPA simulator with two or more “own ships” and several others controlled by the instructor. Each exercise will involve observing the movement of ships seen on the radar, recognizing those presenting a threat of collision and taking action to avoid collisions. Trainees will act either as master or as an observing officer for the exercises and will change roles to allow each turn to command their “own ship”.
2. As the course progresses, exercises of increasing complexity will be set to provide realistic practice in the use of radar and ARPA for navigation and collision avoidance in confined waters with heavy traffic.
3. Each exercise will be followed by a class discussion, giving participants the opportunity to analyse the actions taken and discuss possible alternatives.



Entry Requirements

1. Certified Marine pilots who have completed Radar navigation and plotting and ARPA operation.



Course Outline

1. Course Introduction Theory
2. Simulation Training
3. Summary & Course Evaluation

