Website: www.irclass.org/academy

TRAINING CATALOGUE

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IRCLASS ACADEMY

YOUR PARTNER IN MARITIME PROFESSIONAL DEVELOPMENT

What do we do?
Training solutions offered by IRClass Academy focus on:

- Corporates and organisations seeking to upgrade on-job performance of their employees
- Individuals aiming to enhance their competencies as a part of their professional development

What are the segments that we cater to?
IRClass Academy delivers customised training solutions for Maritime Sector across following segments:

1) Ship operations
2) Ship Design & Shipbuilding
3) Ports & Terminals
4) Ship Recycling
5) Maritime Management Systems

How do we deliver our training solutions?

- Classroom-based interactions with Subject Matter Experts
- Seminars and workshops
- In-company training delivered at client locations
- E-learning

What are the courses on offer?
Please go through the courses listed in our catalogue. In case you have a specific need which is not listed here, please send us your enquiry or phone us. We will get in touch with you.

When are these courses scheduled for delivery?
Please see the Training Calendar on our website or mail us or call us to know the latest schedule.

What about the fees?
Please e-mail us or call us to know about the fee structure.

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SHIP OPERATIONS

PORT STATE CONTROL (PSC) AND FLAG STATE INSPECTIONS (FSI)

COURSE OBJECTIVES To enhance the preparedness of personnel engaged in ship operations towards prevention of PSC and FSI detentions.

ABOUT THE COURSE Delivered in the workshop mode, this one-day training programme draws extensively from examples and actual cases of PSC and FSI detentions and observations made during the inspections. The participants will gain insights into real-life situations, enabling them to improve planning and preparations for PSC/FSI inspections, contributing to prevention of detentions.

PARTICIPANTS Master Mariners, Chief Engineers, seafarers, superintendents, officers and staff from shipping and ship management companies.

DURATION One day

KEY TOPICS

- Brief introduction to PSC and FSI mechanisms and the typical scope of inspections carried out under these regimes.
- Data and insights into current trends in PSC and FSI findings and detentions arising from inspections carried out by various MoUs under the PSC and FSI.
- Examples and cases of actual PSC and FSI detentions.
- Analysis of select detention cases to gain insights into underlying factors/causes.
- Discussion and group work on how these incidents could have been prevented through adequate preparations and advance planning; and
- Summary and listing of the key takeaways from the programme that need application in the day-to-day work of the participants.

EXECUTIVE MANAGEMENT COURSE IN SHIP SUPERINTENDENCY

COURSE OBJECTIVES • To facilitate and expedite the orientation and induction of sea-faring o icers at the management level into superintendent's role ashore and

•To enable serving ship superintendents and managers to update their knowledge and understanding of:

- Regulatory framework – including upcoming regulations
- Technical functions and
- Commercial aspects of ship management.

On successful completion of the course, the participants will enhance their decision-making and problem-solving abilities in respect of day-to-day functions in Ship Superintendency.

ABOUT THE COURSE E ective management of ship operations calls for a firm grasp of a wide range of disciplines, coupled with an ability to take informed decisions, integrating shipboard and shore-based functions in a dynamic and demanding business environment. All ship management decisions are taken and implemented across three distinct areas:

- Regulatory
- Technical and
- Commercial

This course is offered as a modular programme covering above three areas. The delivery of the programme is spread over five independent, stand-alone modules that are offered separately. A participant can complete one module at a time, according to his/her choice and convenience:

- Ship Surveys & Certificates
- Commercial aspects of shipping
- Hull inspection (Bulk Carriers & Oil Tankers)
- Planning, preparation & managing dry-docking and major repairs
- Workshop on Techno-commercial issues in ship operations

Certification will be module-based.

PARTICIPANTS

- Serving Superintendents and Technical/ Commercial Managers working with shipping and ship management companies, who wish to refresh and update their knowledge and understanding.
- Master Mariners and Chief Engineers intending to serve as Superintendents in ship-owning/ ship-management companies.
- Management-level sea-faring officers wanting to acquire the perspective of the owner/ ship-manager.

DURATION

Five independent modules, one day each.

MODULES

- Ship Surveys & Certificates (Class & Statutory)
- Commercial Aspects of Shipping
- Hull inspection (Bulk Carriers & Oil Tankers) & Repairs
- Planning, preparation & managing dry-docking and major repairs
- Workshop on Techno-commercial aspects of Shipping

SHIP SURVEYS & CERTIFICATES: CLASS AND STATUTORY

COURSE OBJECTIVES

- To provide a clear understanding of Class (Hull & Machinery) and Statutory survey requirements and their objectives, scope, periodicity, typical findings, etc.
- To enable participants to effectively plan and coordinate Class (Hull & Machinery) and statutory surveys.

ABOUT THE COURSE

With the shortened port stays, the ship's staff as well as shore-based technical managers are under increasing pressure to fulfil various survey requirements within the available windows. Better understanding of scope of survey requirements (Class and Statutory) will enable them to plan and prepare more effectively and meet the requirements efficiently.

PARTICIPANTS

- Serving Superintendents, who wish to refresh and update their knowledge and understanding.
- Master Mariners and Chief Engineers, who are aspiring to serve as Superintendents in ship-owning/ ship-management companies.
- Management-level sea-faring officers wanting to acquire the perspective of the owner/ ship-manager.

DURATION

One day

KEY TOPICS

- Vessel registration & Classification and Transfer of Class. Change of ownership. Scope and validity period of certificates issued to the vessel
- Listing of Classification (Hull & Machinery) and Statutory surveys; their scope and periodicity
- Survey requirements & planning; window periods for completion of various surveys
- Survey and maintenance of Certificates and related documents issued under SOLAS & MARPOL and other statutory instruments
- Planning & preparations for meeting the Special Survey requirements (Class & Statutory)
- Machinery Surveys, damage surveys
- Typical findings – examples and cases
- Key learnings from actual practice

COMMERCIAL ASPECTS OF SHIPPING

COURSE OBJECTIVES On completion of the course, the participants will understand industry practices in shipping in respect of:

- Different types of ship chartering and roles and responsibilities of ship owner and charterer in each case.
- Superintendents' role in prevention/mitigation of CP claims
- P&I and H&M insurance. Claim procedures; superintendent's role in safeguarding owner's interest
- Vessel's operating budget & effective cost control

ABOUT THE COURSE

Like any other business, shipping operates within the unique ambit of its own risks and rewards. For someone aspiring to become a senior manager in shipping, it is critical to understand the rules of the game that characterise the sector-specific business concerns.

This course aims to provide an overview of how shipping business is organised. It focuses on the commercial awareness required of a shore-based manager.

PARTICIPANTS

- Serving Superintendents, who wish to refresh and update their knowledge and understanding.
- Master Mariners and Chief Engineers, who are aspiring to serve as Superintendents in ship-owning/ ship-management companies.
- Management-level sea-faring officers wanting to acquire the perspective of the owner/ ship-manager.
- Anyone who might be interested to know about the commercial considerations that drive ship operations.

DURATION One day

KEY TOPICS

- Time Charter, Voyage Charter & Bare Boat Charter
- Charter Parties, Owner's/Charterer's obligations & responsibilities
- Superintendents' role in prevention/mitigation of CP claims
- P&I and H&M insurance
- Claim procedures; superintendent's role in safeguarding owner's interest
- Vessel's operating budget & effective cost control

HULL SURVEYS OF BULK CARRIERS & OIL TANKERS

COURSE OBJECTIVES
- Familiarisation of Bulk Carriers and Oil Tankers in respect of various compartments/ spaces
- List out critical structural areas for survey/inspection in advance as a part of planning and preparation
- Plan and prepare for hull surveys of Bulk Carriers and Oil Tankers
- Locate and identify defects and take decisions on remedial measures and repairs in the light of IRS Rule requirements & Survey Procedures

ABOUT THE COURSE Focusing on most common vessel types among conventional merchant vessels, i.e., Bulk Carriers and Oil Tanker, this practical, hands-on (using real-life examples and cases from actual practice) training programme is delivered in the workshop mode.

It aims to improve the quality of planning and preparations undertaken by the seafaring officers as well as the shore-based technical managers in respect of hull surveys.

PARTICIPANTS
- Serving Superintendents, who wish to refresh and update their knowledge and understanding.
- Master Mariners and Chief Engineers, who are aspiring to serve as Superintendents in ship-owning/ ship-management companies.
- Management-level sea-faring officers wanting to acquire the perspective of the owner/ ship-manager.
- Engineers, supervisors and managers from dry-docking and ship repair industry wanting to learn about hull surveys.

DURATION One day

KEY TOPICS
- Typical mid-ship sections and hull structural arrangements of Bulk Carriers and Oil Tankers and terms used
- Close-up surveys of Ballast Tanks, Cargo Spaces of Bulk Carriers & Oil Tankers
- Thickness measurement and interpretation of UT gauging and estimation of steel renewal
- Identify and discuss cases of typical hull structural defects encountered on Bulk Carriers and Oil Tankers
- Guidance on planning and preparation for hull surveys of Bulk Carriers and Oil Tankers – from the ship owner/ operator perspective
- Discussion of cases of hull repairs to rectify the defects found during inspections/surveys

MANAGING DRY-DOCKING

COURSE OBJECTIVES

On completion of the course, the participants will be able to develop an understanding of how to:

- Carry out planning and preparations for dry-docking of a vessel
- Effectively manage the dry-docking within the given time and budget
- Plan and execute major repairs during dry-docking

ABOUT THE COURSE

Dry-docking and major repairs often involve effective coordination among a number of stakeholders such as ship owner's technical managers, ship's staff, dry-dock, Class and statutory surveyors, suppliers of spare parts and stores, service engineers, etc. Consequently, planning and preparations for dry-docking is a critical activity that goes a long way in preventing time and cost overruns and in avoiding nasty surprises.

This course aims to enhance the awareness of the participants in anticipating pitfalls and in planning and preparation for dry-docking from a practical point of view. It is built around case studies and delivered in workshop mode. The course emphasises on adopting project management approach to dry-docking.

PARTICIPANTS

- Serving Superintendents, who wish to refresh and update their knowledge and understanding.
- Master Mariners and Chief Engineers, who are aspiring to serve as Superintendents in ship-owning/ ship-management companies.
- Management-level sea-faring officers wanting to acquire the perspective of the owner/ ship-manager.
- Engineers, supervisors and managers from dry-docking and ship repair industry wanting to learn about project management approach to dry-docking.

DURATION

One day

KEY TOPICS

- Key challenges in dry-docking and the need for project management approach
- Safe working practices in dry-dock
- Dry-docking and repair specification development, tendering and selection of dry-dock
- Advance preparations in HO, on board ship and in the yard
- In-water survey and dry-docking inspection
- Underwater hull and sea connections
- Rudder/Propeller/Tail Sha /Anchor Chain/Anchor
- Major repairs to hull structure: Examples and cases
- Report generation on completion of dry-docking: Examples

WORKSHOP ON TECHNO -COMMERCIAL OPERATIONAL ASPECTS IN SHIPPING

COURSE OBJECTIVES

On completion of the course, the participants will be able to understand and apply the learnings from following areas of ship management:

- Upcoming regulations and their implications for operators
- Monitoring ship performance
- Charter Party obligations
- Crewing challenges
- Managing ships within budget
- Typical issues faced and dealt with by managers ashore on a daily basis
- Industry Best Practices

ABOUT THE COURSE

Effective management of ship operations calls for a firm grasp of a wide range of disciplines, coupled with an ability to take informed decisions, integrating shipboard and shore-based functions in a dynamic and demanding business environment. All ship management decisions are taken and implemented across three distinct areas:

- Regulatory
- Technical and
- Commercial

This course addresses the continuous learning needs of practising shore-based managers as well as shipboard personnel. The course is delivered in the workshop mode with focus on interactive, knowledge-sharing approach.

PARTICIPANTS

- Serving Superintendents, who wish to refresh and update their knowledge and understanding.
- Master Mariners and Chief Engineers, who are aspiring to serve as Superintendents in ship-owning/ ship-management companies.
- Management-level sea-faring o icers wanting to acquire the perspective of the owner/ ship-manager.
- Engineers, supervisors and managers wanting to learn about the impact of recent developments on the role shore based managers.

DURATION

One day

KEY TOPICS

- Upcoming regulations and their implications for operators
- Emerging trends in monitoring ship performance
- Charter Party obligations
- Crewing challenges
- Managing ships within budget
- Typical issues faced and dealt with by managers ashore on a daily basis
- Industry Best Practices

ROLE OF FLAG STATE

COURSE OBJECTIVES
- To familiarise participants with the role, functions and obligations of the Flag State
- To know about the major activities undertaken by Flag State in registration, certification and inspection of ships

ABOUT THE COURSE

This course will enable ship as well as shore-based officers and staff to understand and appreciate the role and responsibilities of the Flag State. It will also help the participants to know how the Flag State fulfils its regulatory obligations and implements various international Conventions that the Flag is a party to. On completion of the course, the participants will be better prepared in meeting and complying with the Flag State regulations.

PARTICIPANTS

Members of senior, middle and junior level management and support staff from shipping companies, seafarers at the operational and management levels, officers/ staff engaged in support functions from Maritime Administrations.

DURATION

One day

KEY TOPICS
- Mandate of the Flag State Administration in implementing national maritime policy
- Role, responsibilities and obligations of Flag State under the provisions of the international Conventions to which, the Flag is a party
- Registration of ships
- Change of flag and name
- Inspections, surveys undertaken and certificates issued by Flag State
- Role in accident investigations

COMPLYING WITH MARITIME LABOUR CONVENTION (MLC 2006)

COURSE OBJECTIVES

- To become aware of the background and provisions of MLC 2006
- To understand the roles and responsibilities of: Flag State, Port State, ROs, Ship Owners and Ship Management Companies, RPSL (Recruitment & Placement Services License) agencies, etc., in complying with the Convention
- To become aware of typical issues arising from implementation of the Convention
- To improve planning and preparations for Flag State and Port State inspections relating to MLC 2006

ABOUT THE COURSE

Initiated by International Labour Organisation (ILO) and entered into force in August 2013, the Maritime Labour Convention (MLC 2006) sets, for the first time, most comprehensively, seafarers' rights to decent work and living conditions. MLC 2006 has come to be recognized as the 'Fourth Pillar' among IMO Conventions (SOLAS, MARPOL and STCW Conventions being the other three).

Delivered in interactive, seminar mode, this course focuses on practical aspects relating to implementation of the Convention by building upon examples and cases arising from inspections. The course aims to enhance the planning and preparations by the multiple agencies involved in recruitment and placement of seafarers.

PARTICIPANTS

Members of senior, middle and junior level management teams including HR managers from shipping and ship management companies; seafarers at the management levels, managers and staff working in RPSL agencies.

DURATION

One day

KEY TOPICS

- Background and overview of MLC 2006
- Explanation on how the 16 Articles and the regulations under five titles are organised
- Conditions of employment of seafarers and minimum requirements to be met to employ seafarers on board
- Scope and implications of Titles 1 to 5 of the Convention
- Effective handling of complaints in accordance with the Convention; examples
- Provisions in seafarer employment contract as determined by the Convention
- Examples and cases from actual practice and lessons learned and guidelines on planning and preparations for MLC inspections

COMPLYING WITH BALLAST WATER MANAGEMENT (BWM) CONVENTION

COURSE OBJECTIVES
- To enhance the participant's knowledge and understanding of Ballast Water Management (BWM) Convention and the impact of its provisions on existing ships.
- To enable the participants to identify actions required by ship operators in order to comply with the provisions of the BWM Convention.

ABOUT THE COURSE With the BWM Convention entering into force on 8 September 2017, ship operators are required to initiate measures to comply with the provisions of the Convention – as applicable to their vessels. This course aims to impart knowledge and understanding of the Convention to shore-based personnel as well as the ships' sta , enabling them to prepare and plan for e ective implementation of the actions required on their behalf in order to ensure compliance.

PARTICIPANTS Serving Superintendents, management and operations level sea-faring officers, shore-based managers and staff from shipping and ship management companies.

DURATION One day

KEY TOPICS
- The need for and background of Ballast Water Management (BWM) Convention
- Scope of BWM Convention and implications for ship operators
- Ballast Water Performance Standard
- Sampling and testing of BW
- BW treatment methods
- Applicability of the Convention
- Class Rule requirements & IRS Class notation for BWM System
- Plan approval & certification process of BWM system & equipment
- Type approval process of BWM treatment systems & equipment
- On board survey of BWM treatment system and issuance of certificates

SHIP ENERGY EFFICIENCY MANAGEMENT PLAN (SEEMP)

COURSE OBJECTIVES

- Acquire a clear understanding of various aspects of ship operations that contribute to effective management of energy efficiency on board
- Be able to plan, implement and monitor appropriate measures on board, which will aim at effective management of energy efficiency

ABOUT THE COURSE

Under the energy-efficiency regulations initiated by IMO, existing ships are required to have an energy efficiency management plan in place. Ship Energy Efficiency Management Plan (SEEMP) has come into force in January 2013. Consequently, all operators have documentation in place to demonstrate their compliance. The course aims to take an integrated view of various operational factors that contribute to energy efficiency.

Case studies and exercises help the participants to not only appreciate the concepts and principles involved, but also apply them to their on-job situations.

PARTICIPANTS

Members of senior, middle and junior level technical management teams from shipping companies; seafarers at the operational and management levels.

DURATION

Two days

KEY TOPICS

- General principles and issues relating to shipboard energy efficiency
- Provisions of ISO: 50001 and ISO: 19030
- Practical examples from shipboard situations that o er potential for enhancing energy efficiency
- Energy efficiency in navigation- voyage planning, trim, auto pilot, etc.
- Energy efficiency in machinery operations- main engine, auxiliary engines, boiler and the related systems.
- Impact of hull and propeller roughness and remedial measures
- Planning and monitoring of shipboard energy efficiency
- Industry ‘Best Practices’

MARINE INSURANCE (H&M, P&I, CARGO CLAIMS)

COURSE OBJECTIVES

Provide participants with:
- Understanding of marine risks and perils of the sea
- Overview of principles of Marine Insurance (Hull & Machinery, Protection & Indemnity, Cargo Claims)
- Understanding of important terms, clauses in marine insurance polices
- Role of legal framework and the principle of General Average
- Examples and cases from actual practice
- Guidelines on claim process
- Guidance on safeguarding employers' business interests

ABOUT THE COURSE

Given the high stakes and risks involved in sea or inland water transport, marine insurance is an important business aspect. Although the subject matter is handled by specialists, it is critical that all the stakeholders involved are adequately informed about the principles and practices of marine insurance as applicable to their respective businesses.

Beginning with principles of marine insurance and then moving on to examples and cases from actual practice, this course provides a number of practical guidelines useful to all those associated with maritime transport.

PARTICIPANTS

Exporters or importers, ship charters, ship owners, ship management companies, technical or commercial managers, port and terminal operators, shipping agents, seafarers at the operational or management levels, officers and staff of marine insurers, stevedores, etc.

DURATION

Two days

KEY TOPICS

- Risks and perils in sea/inland transportation and need for insurance
- Principles of marine insurance
- Typical marine insurance policies and key terms, standard clauses, exclusions, warranties
- Types of loss and measure of indemnity; principle of General Average
- Cargo claims and recoveries and examples and cases from actual practice
- Guidelines on claim process and safeguarding employers' business interests

MARITIME CYBER RISK MANAGEMENT

COURSE OBJECTIVES

On completion of the course, the participants will:

- Enhance their awareness of external and internal threats, risks and vulnerabilities relating to security of data and digitally held information in the organisation
- Understand the significance of cyber security measures at the organisational as well as individual employee level
- Know about cyber security issues specific to maritime industry and their implications
- Learn about purpose and scope of standards governing cyber Risk Management
- Be able to function as a security-conscious individual and also as an active team member in giving full effect to implementation of cyber security measures initiated in one's own organisation

ABOUT THE COURSE

In today's digitally connected, Internet-driven world, with its increasing vulnerabilities originating from anti-social elements, cyber security has assumed an unprecedented significance and urgency. Maritime industry, which has been a relatively new entrant into the digital world has begun to grasp the significance of cyber security- at the organisational as well as employee level.

This course aims to enhance the awareness of participants in respect of the emerging digital security concerns in the maritime industry. It also updates their understanding of the measures initiated and standards developed and applied to ensure effective Cyber Risk Management.

PARTICIPANTS

Officers and staff of shipping and ship management companies, ports and terminals, shipping agents, suppliers and service providers to the maritime industry.

DURATION

Half-day

KEY TOPICS

- External and internal threats, risks and vulnerabilities relating to security of data and digitally held information in the organisation
- Cyber security issues specific to maritime industry and their implications
- Purpose and scope of IMO's 'Interim Guidelines on Maritime Cyber Risk Management' MSC Circular 1526
- How to function as a security-conscious individual and also be an active team member in implementing cyber security measures initiated in one's own organisation?

SHIP DESIGN
& SHIPBUILDING

ENERGY EFFICIENCY DESIGN INDEX (EEDI)

COURSE OBJECTIVES

- To appreciate the background of Energy Efficiency Design Index (EEDI)
- To understand the concept of EEDI and its application
- To know how to calculate EEDI
- To apply EEDI to example ship design projects

ABOUT THE COURSE

To ensure cleaner and greener shipping, IMO has adopted mandatory means of measuring energy-efficiency, known as EEDI with the aim of reducing fuel consumption right at the design stage of ships.

IMO has also established a series of baselines for the amount of fuel each type of ship burns for a certain cargo capacity. Through EEDI, the ships built in the future will have to beat that baseline by a set amount, which will get progressively tougher over time. By 2025, all new ships will be required to be 30% more energy efficient than those built in 2014.

The EEDI is therefore an estimated measure of transport efficiency of a ship, which currently under the design stage. As such, it is important index for designers and builders of ships.

PARTICIPANTS

Engineers and Naval Architects engaged in design of ships, engineers and managers working in shipyard design and drawing o ice, consultants and ship owners' technical managers engaged in developing specifications for shipbuilding, superintendents tasked with supervision of new building, etc.

DURATION

One day

KEY TOPICS

- Background of EEDI
- Role and requirements of IMO
- Scope and application of EEDI
- How to calculate EEDI?
- Examples and cases

PROPULSION SYSTEM INTEGRATION (PSI)

COURSE OBJECTIVES

- Understand the correlation between resistance, speed and powering of ships
- Interpret results of model tests to arrive at powering estimates a er allowing for various margins
- Understand the design consideration involved in selection of marine propulsion systems in the light of mission statement of the vessel as specified
- Interpret the data provided by manufacturers of individual machinery/ components of a propulsion system (prime mover, gearbox, shafting, propeller, Power Take-off, shaft generator, etc.) and match their individual performance characteristics to propose a stable propulsion system configuration, which will meet the specified operational requirements
- Understand power management scenarios in different operating conditions and propulsion controls
- Carryout detailed system integration by applying the learning through a case study

ABOUT THE COURSE

Choosing the propulsion systems could become a challenge for non-conventional and specialist vessels – such as naval ships, drill ships, vessels engaged in o shore services, etc., which are typically engaged in multi-tasking in a wide range of operating conditions.

PARTICIPANTS

Engineers and Naval Architects engaged in design of ships, engineers and managers working in shipyard design and drawing office, consultants and ship owners' technical managers.

DURATION

Four days

KEY TOPICS

- Correlation between speed and powering
- Interpretation of mission statement and impact of operating conditions on propulsion system
- Interpretation of manufacturers' data in proposing a propulsion system
- Power management in different operating conditions
- PSI for a given vessel/hull through a case study

CLASS REQUIREMENTS IN DESIGN & CONSTRUCTION OF SHIPS

COURSE OBJECTIVES

On successful completion of the course, the participants will be able to:

- Enhance their knowledge and understanding of Class Rules in ship design and shipbuilding
- Work with Class Rules effectively in their day-to-day work in design and shipbuilding projects
- Minimise time taken to obtain approvals from Class in the design/ shipbuilding processes

ABOUT THE COURSE

Before venturing into detailed design and development of production drawings, it is essential to meet with the Class Rules. Even in the detailed engineering stage, a number of Class Rules become applicable. Also, during the actual ship construction, a number of Class Rules need to be complied with. It is critical for the shipyard team to have a clear understanding of the Rules and the approval criteria.

This course focuses on interpretation and application of Class Rules for ship design and shipbuilding.

PARTICIPANTS

Engineers and Naval Architects engaged in design of ships- engineers and managers working in shipyard design and drawing o ice, QA/QC personnel, engineers and supervisors engaged in shipbuilding, consultants and ship owners' technical managers engaged in developing specifications for shipbuilding, superintendents tasked with supervision of new building, etc.

DURATION

Four days

KEY TOPICS

- Role of Class, overview of Rules applicable to ship design/ construction.
- Quality Assurance Plan (QAP); role of various stakeholders in its execution
- Ship design process, Rule requirements, plan approval, inspection/survey of:
    - Hull: Design loads, longitudinal strength and scantlings, local strengthening, bottom structure, engine seating, bulkheads, damage stability, opening and closing appliances, ventilators, air pipes, anchoring/ mooring equipment, welding, NDE, hull inspection, workmanship, testing.
    - Machinery: General requirements, piping design requirements, pumping and piping, prime movers, shafting, stern tube, propeller and rudder, steering gear, boilers and pressure vessels.
    - Electrical: Load analysis, electrical powering, single-line diagram, electrical installation.
    - Fire Safety Requirements: Prevention of fire & explosion, escape

QUALITY ASSURANCE PLAN (QAP) FOR SHIPBUILDING

COURSE OBJECTIVES

To enable the participants to understand the QAP and enable them to prepare, review and comment on the same as per their role. Participants will be able to implement the QAP requirements with a greater understanding during the construction of the ships.

ABOUT THE COURSE

Delivered in the classroom mode and built around practical examples, different activities involved in ship construction, their sequence and significance, checks and controls to be effected, responsibilities of different stakeholders, etc. This course aims to provide a strong background in preparation and implementation of the QAP. Typical scenarios arising during implementing QAP are discussed using the case study approach. Participants are guided to enhance their decision-making abilities in real-life situations.

PARTICIPANTS

QA/QC personnel of shipyards, owner's representatives, WOT & CGOT overseers of Navy and Coastguard, consultants, Class surveyors, etc.

DURATION

One day

KEY TOPICS

- Stakeholders in a ship construction project and their perspectives.
- Activities involved in ship construction and their impact on the quality of a ship in meeting its specification requirements.
- Methods of control to be implemented stage-wise or continuously and the parties responsible.
- Various acceptance criteria as defined in Rules/IACS/Other standards.
- Discuss appropriate corrective and preventive actions.
- Records to be maintained, release notes to be issued, documentation needed, etc.

WELDING PROCEDURE SPECIFICATION (WPS) FOR SHIPBUILDING

COURSE OBJECTIVES

On successful completion of the course, the participants will be able to:
- Prepare a Welding Procedure Specification
- Plan and prepare for a welding procedure qualification test
- Understand the process involved for welder qualification

ABOUT THE COURSE

In steel fabrication industries including construction of ship's hull, where welding is a critical activity – international standards and industry practices call for qualified Welding Procedure Specification.

This course aims to enable the participants to develop WPS on their own and get it qualified. It will also explain the process involved in welder qualification by Class.

PARTICIPANTS

Design engineers, Naval Architects, Production Managers, Project Managers, QA/QC personnel, Welding Supervisors

DURATION

Two days

KEY TOPICS

- Welding processes (ISO 4063)
- Grouping of materials (ISO/TR 15608)
- Welding positions (ISO 9692)
- Choosing weld consumables
- Calculation of pre-heat and inter-pass temperatures
- Calculation of heat input
- Non-destructive tests of weld samples
- Dra ing of WPS (ISO 15609)
- Qualifying WPS (ISO 15614)

SHIPBUILDING SUPERVISION ON BEHALF OF SHIP OWNER

COURSE OBJECTIVES

To be able to effectively represent and safeguard ship owner's interests and supervise shipbuilding in a new construction project

ABOUT THE COURSE

Delivered in the classroom mode and built around practical examples from actual projects, different activities involved in ship construction, their sequence and significance, checks and controls to be effected, responsibilities of stakeholders. This introductory course prepares the experienced marine engineers and naval architects to take on the role of being the owner's representative. Participants are guided to enhance their decision-making abilities in real-life situations through owner's perspective of shipbuilding contract.

PARTICIPANTS

Marine engineers who served on board as Chief Engineers and Naval Architects with ship design/construction experience or exposure, who intend to assume the role of owner's representatives in shipbuilding projects

DURATION

Two days

KEY TOPICS

- Overview of role of owner's representative in a shipbuilding project
- Understanding and interpretation of true intent of owner's specifications and shipbuilding contract
- QAP and role of various stakeholders (i.e., yard, Class, owner) and the associated inspections/surveys
- Review of construction plans submitted for owner's approval- examples
- Dealing with deviations, commercial implications and change management
- Typical yard practices and project experience gathered (in India, China and Korea)
- Preparation of periodic reports for the owners; examples and formats

SAFE WORK PRACTICES IN SHIPBUILDING & SHIP REPAIRS

COURSE OBJECTIVES

To enhance the hazard-awareness and improve safe work practices among workers and supervisors involved in shipbuilding and major ship repairs- by focusing on:

- Hazard identification in work spaces
- Assessment of risks (to personnel, assets/equipment and environment)
- Measures to improve safe work practices and overall safety standards

ABOUT THE COURSE

Aimed at enhancing safe work practices among workers and supervisors engaged in shipbuilding and ship repair industries, this two-day course is delivered in the workshop mode. On the second day, guided visits are undertaken to enable the participants to apply the learning. The emphasis is on best practices in Health, Safety and Environment (HSE). The course can be delivered in Hindi or any other local (Indian) language, as per the customer's choice.

PARTICIPANTS

Workers and supervisors engaged in shipbuilding and ship repairs

DURATION

Two days

KEY TOPICS

- Classification of work activities. Routine and Non-routine activities
- Identification of hazards, their source and impact
- Description of Hazardous Event(s) - Possible Injury / Ill Health
- Identify risk controls - existing Risk Control measures
- Determination of risk - Initial and Residual risk evaluation
- Risk Control and measures to improve safety of operations
- Preparation of sample checklists
- Site visit along with training faculty for mentored hazard assessment and risk mitigation
- Discussions on visit outcomes with faculty and areas of improvement
- Role of workers/supervisors in ensuring safe operations

WELDING PROCESSES & CONTROL OF DISTORTION IN SHIPBUILDING

COURSE OBJECTIVES	By the end of the program, the participants will become aware of major welding processes adopted in ship construction and know about measures to control and prevent weld defects and distortions of the ship structures during construction.
ABOUT THE COURSE	The course will be delivered in the classroom with video examples of different processes. Area of application of these processes, controls needed to avoid / reduce weld defects, etc., will be discussed. It would be an interactive session, sharing the experiences of the trainers as well as the trainees.
PARTICIPANTS	Young engineers from shipyards, Class Surveyors, Owner's representatives, WOT & CGOT Inspectors & Overseers, Welding Supervisor, contractor, foreman, etc.
DURATION	One day
PRE-TRAINING REQUISITES	Shipbuilding background with an overall knowledge of the welding processes
KEY TOPICS	• Different types of welding methods/processes in ship construction. • Impact of welding processes on quality of a ship. • Methods of control to be implemented stage-wise /continuously and party responsible for the same. • Sequence of welding to prevent undue heat input and distortion • Checking by visual and NDE methods • Corrective and preventive actions for the distortions. • Records to be maintained, release notes to be issued, etc.

NON-DESTRUCTIVE EXAMINATION (NDE) IN SHIPBUILDING

COURSE OBJECTIVES	By the end of the program, the participants will become aware of major NDE practices adopted in ship construction. They would be able to appreciate the suitability of the type of NDE method appropriate for different jobs and recognise various results and corresponding defects.
ABOUT THE COURSE	The course will be delivered in the classroom with a display of instruments. Area of application of different NDE techniques and interpretation of the results will be discussed.
PARTICIPANTS	Young engineers and QA/QC inspectors and foremen from shipyards; Class surveyors, owner's representatives, WOT & CGOT Inspectors & Overseers from Navy and Coastguard, Welding contractor, etc.
DURATION	Two days
PRE-TRAINING REQUISITES	Shipbuilding background with knowledge of welding
KEY TOPICS	• Standard NDE Processes and qualifications needed for the operator, reviewer, etc. • Four major NDE techniques – namely, RT, UT, DPT & MPT, which are used in ship construction inspection. • Advantages of each of these and examples of areas or jobs where each of these techniques can be used. • Calibration methods and result acceptance criteria. • Safety precautions associated with these NDEs • Acceptance criteria of the indications observed. • Practical demonstration of UT, DPT, MPT and reviewing of radiographic films

QUALITY CHECKS & INSPECTIONS IN NAVAL / COASTGUARD SHIPBUILDING

COURSE OBJECTIVES

On completion of training, the participants will be able to function as members of shipbuilding supervision team with an understanding of the processes involved in shipbuilding, with a deeper knowledge of various aspects of shipbuilding and an understanding of their role and responsibilities in terms of checks and inspections that they are expected to carry out in the yard.

ABOUT THE COURSE

Although the core shipbuilding processes are fundamentally the same for most ship types, additional functions and complex integration issues drive the inspection processes in naval and coastguard construction. Consequently, construction of naval and coastguard vessels has evolved as a specialist branch of shipbuilding. This course has been designed to address the training needs of inspectors representing the vessel owners as well as the QA personnel of defence yards.

PARTICIPANTS

The targeted participants are graduates or diploma holders in Naval Architecture, Mechanical or Electrical Engineering with experience in naval/coastguard ship operations and repair, but have had limited exposure to shipbuilding.

DURATION

Five days

PRE-TRAINING REQUISITES

Shipbuilding background with knowledge of the welding processes

KEY TOPICS

- Shipbuilding process & related inspections during various stages of construction in respect of: Hull, Machinery and Electrical Systems
- Class rules, regulations specific to inspection, testing and trials Plan approval process, follow-up & implementation of drawing comments.
- Inspection plan as per QAP; responsibilities of stakeholders
- Records/documents to be generated by the WOT, Class & Yard QC
- Specialist topics: Welding, NDT

PORTS & TERMINALS

CONDITION ASSESSMENT OF PORT & TERMINAL ASSETS

COURSE OBJECTIVES

On completion of the course, the participants will be able to enhance their awareness and understanding of:

- The need for periodic assessment of condition of high-value assets of a port/terminal (civil, mechanical and electrical) and ascertain residual life
- Benefits derived from condition assessment of port's assets and consequences of *not* undertaking condition assessment. Learning from examples and cases where actual assessments have been carried out
- Methodology deployed for assessing port's assets
- Typical remedial action required to improve condition of port assets and extend their life cycles

ABOUT THE COURSE

High-value, custom-built assets, i.e., civil, mechanical and electrical-owned and operated by a port or terminal are subject to normal wear and tear and prone to damage during operations. By periodically assessing their condition and ascertaining residual life, measures can be initiated to extend their life and plan future replacement.

IRClass has been undertaking such assessments for various ports and terminals. Developed in response to industry needs, this course aims to enhance the awareness of the participants and provide them with an insight into the life-cycle behaviour of the key assets owned and operated in the segment.

This course is based on actual experience gathered by subject matter experts. As such, it will focus on practical aspects such as methodology and recommended periodicity of assessment, measures to be initiated to extend the life of the asset, etc.

PARTICIPANTS

Officers, managers and engineers of ports and terminals as well as port planners, designers and developers, Engineering, Procurement & Construction Companies (EPC) and consultants

DURATION

One day

KEY TOPICS

- Need for periodic assessment of condition of assets of ports/terminals and determination of their residual life
- Methodologies for condition assessment
- Reference Documents and standards
- Examples and case studies

SINGLE BUOY MOORING & CRUDE OIL TERMINAL OPERATIONS

COURSE OBJECTIVES

On successful completion of the course, the participants will acquire knowledge of working principles, safe work practices and inspection/ survey of all major systems and equipment relating to operation of:

- Single Buoy Mooring (SBM) and
- Crude Oil Terminal

ABOUT THE COURSE

With the increased capacities of crude tankers matching the import of the larger parcel sizes to meet the rising demand for downstream products and also to take advantage of economies of scale, SBM has emerged as the preferred option – since it does not necessitate deep water port development. SBM and large crude storage capacity ashore coupled with a terminal or pumping station exporting to refinery are a commonly deployed, commercially viable combination.

This course aims to enhance the knowledge and understanding of operators, supervisors and engineers engaged in operation, inspection and maintenance of SBM and crude storage and export terminals and the associated systems and equipment.

PARTICIPANTS

Technicians or diploma or graduate mechanical engineers with: i) a minimum experience of three years in crude oil export terminal operations and ii) proficiency in English language.

DURATION

Four days

KEY TOPICS

- Safe operation, inspection & maintenance of heat exchangers and
- Centrifugal pumps
- Pipelines & valves
- Crude oil storage & safe handling
- Control systems, SCADA, PLC
- Oil export operations; pigging process
- SBM & Mooring Arrangement: Key components. Inspection & Survey requirements
- Hazards and risks associated with crude oil handling and safe work practices
- Fire safety, gas detection
- Introduction to HAZOP, QRA

LNG TERMINAL OPERATIONS

COURSE OBJECTIVES On successful completion of the course, the participants will acquire knowledge of working principles, safe work practices, survey requirements and inspection of all major systems and equipment relating to operation of LNG Import Terminal.

ABOUT THE COURSE

Given its minimal environmental impact as compared to crude oil based petroleum products, Liquefied Natural Gas (LNG) is widely recognised as the clean fuel of the future. With a few nations exporting LNG - mainly to cater to rising demand from countries - such as India, the number and capacities of LNG import terminals are poised to increase significantly.

This course aims to enhance the knowledge and understanding of operators, supervisors and engineers engaged in operation, inspection and maintenance of LNG import terminals and the associated systems and equipment.

PARTICIPANTS Technicians or diploma or graduate mechanical engineers with: i) a minimum experience of three years in LNG import terminal operations and ii) proficiency in English language.

DURATION Three days

KEY TOPICS

- Safe operation, inspection & maintenance of heat exchangers and gas compressors
- Pipelines & valves
- Control systems, SCADA, PLC
- LNG import operations
- Guidelines on ship-terminal coordination & communications
- LNG storage
- Regulations, standards, inspection/survey guidelines applicable to LNG terminal operations
- Hazards and risks associated with LNG handling
- Fire safety, gas detection
- Safe work practices; safety audits
- Introduction to HAZOP, QRA

SHIP RECYCLING

HONG KONG CONVENTION ON SHIP RECYCLING

COURSE OBJECTIVES

To familiarise the participants with the provisions and guidelines of the Hong Kong Convention on Ship Recycling

ABOUT THE COURSE

The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (in short, the Hong Kong Convention or HKC), was adopted at a diplomatic conference held in Hong Kong in May 2009. The Convention is expected to come into force very soon. Meanwhile, the EU has gone ahead and announced its own guidelines- on similar lines as HKC.

Regulations in the new Convention cover the design, construction, operation and preparation of ships. Upon entry into force, ships sent for recycling must carry an Inventory of Hazardous Materials (IHM). An initial survey is carried out to verify the inventory of hazardous materials, additional surveys during the life of the ship, and a final survey before recycling.

Ship recycling yards must prepare a ship-specific recycling plan, specifying how each ship will be recycled. Member states will be required to ensure that such facilities fully comply with the Convention.

Delivered in the seminar mode, this half-day, interactive session focuses on awareness-building, covers the provisions of the Convention and addresses any questions that the participants might have.

PARTICIPANTS

Technical managers from shipping and ship management companies, shipyards, managers and supervisors from ship recycling companies. Maritime Boards, port administrations involved in ship recycling.

DURATION

Half-day

KEY TOPICS

- Background of Hong Kong Convention 2009 (HKC)
- Provisions of HKC and its implications for:
  - Ship owners
  - Ship management companies
  - Shipyards
  - Ship recycling companies
  - Government bodies engaged in facilitating ship recycling

HSE TRAINING OF PERSONNEL ENGAGED IN SHIP RECYCLING

COURSE OBJECTIVES

To enhance the awareness of the workers and supervisors regarding the risks involved in ship recycling industry and to develop an understanding of the safe work practices including practical drills on fire-fighting, oil spill prevention, basic first aid and complying with the requirements relating to Inventory of Hazardous Materials (IHM).

ABOUT THE COURSE

India is a world leader in ship recycling and the Hong Kong Convention has been a game changer in this segment. In addition, the EU has also spelt out its own guidelines for certification of Ship Recycling Facilities and corresponding training requirements. The course can be delivered in Hindi or any local (Indian) language.

PARTICIPANTS

Workers and supervisors engaged in ship recycling industry.

DURATION

Four days

KEY TOPICS

- Introduction on importance of safe work practices
- Risks of fire & explosion in ship recycling industry
- Fire prevention & protection
- Safe practices in gas-cutting
- Practical training & drill on use of fire extinguishers
- Safe practices: Working at heights
- Safe practices: Entry into enclosed spaces
- Safe practices: Handling asbestos
- Oil spill: Prevention
- Oil spill response: Drill
- Basic first aid
- Inventory of Hazardous Material (IHM)

ISO 30000:2009 SHIP RECYCLING MANAGEMENT SYSTEM

ABOUT THE COURSE

ISO 30000 Standard addresses the employees engaged in ship recycling are given right environmental protection. It is an independent recognition of good practice. It would be valuable to have the Standard in place when the ship recycling services are offered and also when clearances are sought from authorities.

PARTICIPANTS

Managers, supervisors and employees engaged in ship recycling.

DURATION

Four days

KEY TOPICS

- General Safety Introduction
- Handling and management of hazardous materials
- Fire protection and prevention
- First aid
- Oil spillage on sea and plot
- Gas cutting operation
- Working at height
- Confined space entry, use of Self-contained Breathing Apparatus (SCBA)
- Removal of Asbestos containing Material (ACM)
- Crane and forklift operation
- Batteries handling procedure
- Fire-fighting, First Aid
- Mock drills: Response to fire alarm/siren, Evacuation drill, Oil/ Chemical Spill Response in water/on land

MARITIME MANAGEMENT SYSTEMS

ISM-ISPS-MLC AWARENESS COURSE

COURSE OBJECTIVES

To develop an understanding of the provisions of ISM/ISPS and the Maritime Labour Convention (MLC) and to take an effective part in the related auditing processes.

ABOUT THE COURSE

Delivered in the workshop mode, this highly interactive course, provides the participants with an understanding of various audits conducted (Flag State, RO and Internal) under the Conventions relating to ISM/ISPS/MLC, at the awareness-building level.

PARTICIPANTS

Officers and staff working in shipping/ ship management companies, Administration, Maritime Boards, etc., who wish to enhance their knowledge and understanding of the scope and application of ISM/ISPS and MLC.

DURATION

One day

KEY TOPICS

ISM
- Background of ISM code
- SOLAS Chapter IX
- ISM code overview: Clauses 1 to 16
- DOC and SMC certificates
- ISM audits, audit findings, corrective & preventive measures

ISPS
- Background of ISPS Code
- ISPS Code requirements
- Role of SSO, CSO
- Security drill, exercises & audit

MLC
- Background and overview of MLC-2006
- Implementation of MLC -2006
- MLC audits and certification

ISM INTERNAL AUDITOR COURSE

COURSE OBJECTIVES

To enable the participants to understand, interpret and apply the provisions of the ISM Code in order to function as internal auditors.

ABOUT THE COURSE

Delivered in the workshop mode, this course focuses on: Understanding and interpretation of various clauses of the ISM Code (SOLAS Ch. IX) and on practical skills for carrying out effective internal audits. The participants will be required to undertake exercises and mock audits under the supervision of subject matter experts.

PARTICIPANTS

Master Mariners, Chief Engineers, officers and staff working in shipping and ship management companies, fleet operations, etc., who wish to enhance their knowledge and understanding of the scope and application of ISM Code.

DURATION

Three days

KEY TOPICS

- Background of ISM code
- SOLAS Chapter IX
- ISM Code overview
- Safety Management System (SMS)
- Explanation of ISM Clauses 1 to 16 with examples
- Risk & risk assessment
- ISM audit process
- Audit findings, corrective & preventive measures
- Mock audit
- DOC and SMC certificates

DESIGNATED PERSON ASHORE (DPA)

COURSE OBJECTIVES To enable the participant to carry out the functions of Designated Person Ashore (DPA) under the provisions of ISM.

ABOUT THE COURSE

DPA is a key, shore-based person, who is responsible for effective implementation of the company's safety management system and for promoting safety culture DPA verifies and monitors all safety and pollution prevention activities in the operation of each ship. It is therefore imperative that such a person is given appropriate orientation and skills to carry out this vital function.

PARTICIPANTS

According to the guidelines of DG (Shipping), the DPA should possess:

- Adequate shipboard sailing experience as Chief Engineer or Master
- Knowledge and understanding of ISM Code, mandatory rules and regulations, applicable codes, guidelines and standards
- Knowledge on assessment technique of examining, questioning, evaluating and reporting, technical or operational aspects of safety management, appropriate knowledge of shipping and shipboard operations experience of participation in at least one marine-related management system audit and
- Effective communication with shipboard staff and senior management and should be able to determine effectiveness of SMS by using Internal Audits, Management Review
- Be able to gather and analyse data from hazardous occurrences/ situations, near misses, incidents and accidents and apply the lessons learnt to improve the SMS.

DURATION

Half-day, in continuation of the three-day ISM Internal Auditor's Course

KEY TOPICS

- Implementation of the safety and environmental protection policy.
- To carry out internal audit both ashore and on board all ships.
- Visits/ inspections on board to monitor activities relating to SMS.
- Reporting/analysis of non-conformities, accidents, incidents; and
- Ensuring that adequate resources and shore-based support is provided.

COMPANY SECURITY OFFICER (CSO)

COURSE OBJECTIVES

Those who successfully complete this course will be able to discharge the following duties of CSO:

- Advising the level of threats likely to be encountered by the ship based on security assessment;
- Ensuring that ship security assessments are carried out;
- Development, approval and the implementation and maintenance of the ship security plan;
- Arranging for internal audits and reviews of security activities;
- Arranging for the initial/subsequent verifications of the ship security plans by Administration;
- Ensuring adequate training for personnel responsible for the security of the ship.

ABOUT THE COURSE

This course is approved by Directorate General (Shipping), Govt. of India. It provides knowledge in communicating and coordinating effectively between ship and shore in matters of updating ship security plans, assessment and audit of shipboard security and in meeting the requirements of the Administration and in rectifying any deficiencies and non-conformities reported.

PARTICIPANTS

Shore-based personnel, who will be able to coordinate between ship and shore on matters of security – preferably with knowledge, understanding and experience of shipping operations. Those who may be designated to perform the duties and responsibilities of a Company Security Officer.

DURATION

Three days

KEY TOPICS

- Introduction: Current security threats in the maritime context.
- Maritime security policies: Relevant international conventions.
- Security responsibilities: Roles of SSO, CSO, PFSO
- Workshop on: Security Assessment, security survey, documentation
- Security plan: Purpose, contents, confidentiality, implementation, review/ revision, equipment
- Threat identification, recognition & response
- Emergency preparedness, drills & exercises
- Piracy & armed robbery
- Actions required by different security levels and communication channels
- Security administration. Documentation, security audits, reporting of non-conformities, records
- Security training
- Approval of security plan

PORT FACILITY SECURITY OFFICER (PFSO)

COURSE OBJECTIVES

Those who successfully complete this course will be able to discharge the duties of PFSO, which typically include:

- Conducting an initial security survey of the port facility;
- Ensuring the development, maintenance and implementation of the Port Facility Security Plan;
- Enhancing security awareness and vigilance of the port facility personnel including training;
- Reporting to the authorities; maintaining records of occurrences that threaten the security of the facility;
- Coordinating with security services, as appropriate;
- Ensuring that security equipment is properly operated, tested, calibrated and maintained

ABOUT THE COURSE

This course is approved by the Directorate General (Shipping), Govt. of India. It provides knowledge in communicating and coordinating effectively between ship and shore in matters of assessment of port security, development and implementation of port security plan, undertaking security inspections, reporting deficiencies, enhancing security awareness and coordinating with security agencies.

PARTICIPANTS

Shore-based personnel, who will be able to coordinate between ship and shore on matters of security- preferably with knowledge, understanding and experience of shipping and port/terminal operations. Those who may be designated to perform the duties and responsibilities of a Port Facility Security Officer.

DURATION

Three days

KEY TOPICS

- Introduction: Current security threats in the maritime context.
- Maritime security policies: Relevant international conventions.
- Security responsibilities: Roles of SSO, CSO, PFSO
- Workshop on: Security Assessment, security survey, documentation
- Security plan: Contents, review/ revision
- Threat identification/response. Preparedness, drills/ exercises
- Piracy & armed robbery
- Actions required by different security levels and communication channels
- Security administration. Documentation, security audits, reporting of non-conformities, records
- Security training
- Approval of security plan

SHIP SECURITY OFFICER (SSO)

COURSE OBJECTIVES

Those who successfully complete this course will be able to undertake the duties of an SSO, as defined in relevant section of the ISPS Code and the STCW Code. Typically, they include:

- Undertaking regular security inspections of the ship; ensure that appropriate measures are taken;
- Supervising the implementation of the Ship Security Plan;
- Coordinating the security aspects of passengers and/or the handling of cargo and ship's stores
- Enhancing security awareness and vigilance on board;
- Ensuring that adequate training has been provided to shipboard personnel, as appropriate;
- Ensuring that on board security drills and exercises are conducted as per plan;
- Reporting all security incidents; and
- Ensuring that security equipment is properly operated, tested, calibrated and maintained, if any.

ABOUT THE COURSE

This course is approved by the Directorate General (Shipping), Govt. of India. It provides knowledge in communicating and coordinating effectively between ship and shore in: Assessing ship security, developing/implementing ship security plan, undertaking security inspections, reporting deficiencies, enhancing security awareness and coordinating with security agencies.

PARTICIPANTS

Those attending the SSO course shall have approved seagoing service of not less than 12 months or appropriate seagoing service and knowledge of ship operations; and those likely to be designated as SSO.

DURATION

Three days

KEY TOPICS

- Introduction: Current security threats in the maritime context.
- Maritime security policies: Relevant international conventions.
- Security responsibilities: Roles of SSO, CSO, PFSO
- Security Assessment, security survey, documentation
- Security plan: Contents, review & revision.
- Threat identification, response. Emergency preparedness & exercises
- Piracy & armed robbery
- Actions required by di erent security levels and communication channels
- Security administration. Documentation, record-keeping. Security audits, reporting of non-conformities
- Security training

QMS 9001:2015 INTERNAL AUDITOR

COURSE OBJECTIVES

On completion of the course, the participant will understand and apply the knowledge gained in carrying out internal auditing.

ABOUT THE COURSE

Delivered in workshop mode by highly experienced faculty who have been practicing Lead Auditors and with an emphasis on examples and cases from maritime industry, this course addresses the skill required to carry out internal auditing under the newly updated standard ISO 9001: 2015.

CERTIFICATION

Participants who have successfully passed the examination will be awarded the Certificate on successful completion. Candidates who do not get the required marks will be awarded the Certificate of Attendance.

PARTICIPANTS

- Professionals who intend to conduct internal audits with the knowledge and skills needed to assess and report on the conformance and effective implementation of processes.
- Professionals who intend to contribute to the continual performance improvement of their respective organisations.

DURATION

Two days

KEY TOPICS

- High-level Structure of the new standard
- Principles of the ISO 9001:2015
- Understanding the changes from ISO 9001:2008 to ISO 9001:2015
- Role of Management and Management of Change
- Risk Analysis and Mitigation of Risks
- Conducting process-based internal audits based on ISO 9001:2015

QMS 9001:2015 LEAD AUDITOR COURSE (NBQP APPROVED)

COURSE OBJECTIVES	On completion of the course, the participant will be able to apply the knowledge gained to in carrying out Third Party Audit.
ABOUT THE COURSE	• Uses "Accelerated Learning Approach" to optimize learning cycle: Pre-course Quiz, Animated Visuals, practical industrial examples, quizzes & sample outputs, live audits /simulated audit & practical workshops • Comprehensive notes and examples/cases from maritime industry
CERTIFICATION	NBQP Certification on successful completion as meeting the requirements for registration with NBQP as QMS Lead Auditor.
PARTICIPANTS	• Professionals who intend to IMPLEMENT ISO9001:2015 requirements. • Consultants / Trainers • Process Owners • Management Representatives • Corporate Management Representative
PRE-REQUISITES	• It is recommended that the participant shall have adequate knowledge of ISO 9001 Standards and exposure to QMS auditing. • Lack of prior knowledge as above may lead to unsuccessful completion of this course and the gaps in this knowledge will not be covered during this course.
DURATION	Five days
KEY TOPICS	• Purpose of a QMS; the seven principles of quality management. • Purpose, content and interrelationship of ISO 9000, ISO 9001, ISO 9004 and ISO 19011. • Auditing Context of the Organisation, Leadership, Strategic Direction, Risk & Opportunities and Management of Change. • Interpret the requirements of ISO 9001 in the context of an audit. • Roles and responsibilities of auditors and Audit Team Leaders. • Plan, prepare and conduct an audit in accordance with ISO 19011 • Look for conformance, Report the audit findings, including writing valid, factual and value adding non-conformity report, if found • Undertake audit follow-up activities, including evaluating the effectiveness of corrective action. • Role Plays during different phases of auditing

EMS 14001:2015 INTERNAL AUDITOR COURSE

COURSE OBJECTIVES	On completion of the course, the participant will be able to Plan, Conduct and Report Environmental Management System (EMS) Internal audits. Effective implementation and monitoring of ISO 14001:2015
ABOUT THE COURSE	Uses "Accelerated Learning Approach" to optimize learning cycle: practical industrial examples, quizzes & sample outputs, live and simulated audits & practical workshops. Comprehensive course notes with Built around examples and cases from maritime industry.
CERTIFICATION	Award of Internal Auditor certification on successful completion
PARTICIPANTS	• Persons with environmental background or work experience and with an interest to become an ISO 14001:2015 Internal Auditor. Those who have already been functioning as Internal Auditors. • Environmental Consultants. • Process Owners, Sub-Owners who are directly involved in managing their business activities in Manufacturing, Processing and Service industries. • All those with the work responsibility associated with environmental concerns.
PRE-REQUISITES	• It is recommended that the delegates attending this course shall have knowledge of ISO 14001 terminologies. • It is also conveyed that no prior knowledge as above may lead to unsuccessful completion of this course and the gaps in this knowledge may not be covered during this course.
DURATION	Two days
KEY TOPICS	• Introduction of Environmental Management System and ISO 14001:2015 requirements • Context of the Organisation, Interested parties Risk & Opportunities. • Role of Leadership • Environmental Aspect, Evaluation of significance aspects, Objectives & • Management Programs for continual improvement. • National legislation, Legal and other requirements. • Management systems auditing: Audit skills and review; Context; Risk and Opportunities • Audit role play • Classification of findings • Improving & maintaining a EMS

EMS 14001:2015 LEAD AUDITOR TRAINING (NBQP APPROVED)

COURSE OBJECTIVES	• To understand the requirements of Environmental Management System (EMS) based on ISO 14001:2015. • To understand Context of the organisation, Risk & opportunities, Life Cycle Assessment, Protection of Environment, Role of Top Management as a Leader. • To develop documentation system; evolve operational control procedures/ emergency response plan.
ABOUT THE COURSE	Uses "Accelerated Learning Approach" to optimize learning cycle: Practical industrial examples, quizzes & sample outputs, simulated audit & workshops.
CERTIFICATION	Award of NBQP certification on successful completion as meeting the requirements for registration as EMS Lead Auditor.
PARTICIPANTS	• Person with an aptitude towards environmental concern, environmental background or work experience and with an interest to become an ISO 14001:2015 Auditor. • Environmental Consultants. Process Owners, Sub-Owners who are directly involved in managing their business activities in Manufacturing, Processing and Service industries. • All those with the work responsibility associated with Environmental concerns. Internal Auditors
PRE-REQUISITES	The delegates attending this course shall have adequate knowledge of ISO 14001 Standards and some prior knowledge of EMS auditing. Lack of prior knowledge as above may lead to unsuccessful completion of the course
DURATION	Five days
KEY TOPICS	• Introduction of Environmental Management System; Introduction to ISO 14001:2015 requirements • Context of the Organisation, Interested parties and linkage to Risk & Opportunities. Role of Leadership, Identification of environmental Aspect. Evaluation of significance aspects. • National legislation, Legal and other requirements. • Management systems auditing; Key stages of an audit; Document review Audit skills and review, how to Audit Context, Risk and Opportunities. • Audit role play. Audit reporting and follow up. • Improving/maintaining a EMS through effective implementation and monitoring of ISO 14001:2015

ISO / IEC 27001 ISMS AWARENESS COURSE

COURSE OBJECTIVES

On completion of the course, the participant will:

- Understand the significance of safeguarding organisational data and information in the light of possible threats – external and internal
- Learn about the objectives and scope of ISO 27001 Standard in respect of Information Security Management System (ISMS)
- Acquire greater awareness of the underlying risks and receive exposure to typical measures to mitigate the risks within one's own organisation

ABOUT THE COURSE

One of the most vital resources of any organisation is the information held within the company technical, financial, etc., which could be in the paper format or digitally stored in electronic devices.

In today's world, there is a strong need at all levels for safeguarding organisational information against risks posed by people as well as technologies. This course helps in developing such awareness and introduces participants to the provisions of the Standard, ISO 27001.

PARTICIPANTS

Managers, officers and staff who are interested in enhancing their understanding of underlying principles, concepts and practices relating to information security as applicable to their own organisation – in the light of the Standard ISO 27001.

DURATION

One day

KEY TOPICS

- Information Security Background, Concepts & Principles
- Information Assets
- Likelihoods of failures and attacks
- Risk Assessment & Annex – A Controls
- Cost effective and consistent reliability and security of the system
- Brief introduction to audit process

ISO / IEC 27001 ISMS INTERNAL AUDITOR COURSE

COURSE OBJECTIVES

On completion of the course, the participant will:

- Understand the significance of safeguarding organisational data and information in the light of possible threats – external and internal
- Learn about the objectives and scope of ISO 27001 Standard in respect of (Information Security Management System) ISMS
- Acquire greater awareness of the underlying risks and receive exposure to typical measures to mitigate the risks within one's own organisation
- Be able to assess and manage the security policies and processes of the organisation
- Be able to carry out internal as well as external Information Security audits
- Function as an e ective member of the auditing team which will contribute to enhancement of the organisation's information security in line with the Standard
- On completion of the course, the participant will be able to understand and apply the knowledge gained to in carrying out Internal Audit.

ABOUT THE COURSE

One of the most vital resources of any organisation is the information held within the company – technical, financial, etc., which could be in the paper format or digitally stored in electronic devices.

In today's world, there is a strong need – at all levels – for safeguarding organisational information against risks posed by people as well as technologies. This course helps in developing such awareness and introduces participants to the provisions of the Standard, ISO 27001.

PARTICIPANTS

Managers, o icers and sta who are committed to enhancing the information security of their organisations- in the light of the Standard ISO 27001.

DURATION

Two days

KEY TOPICS

- Information Security Background, Concepts & Principles
- Requirements of ISO27001:2013 Standard
- Roles, Responsibilities & Auditing Principles for an Auditor
- Assets Identification & Management
- Risk Assessment & Annex – A Controls
- Internal Audit Reporting (Plan, Execute, Report, Record, Follow-up, Closure)

INTEGRATED MANAGEMENT SYSTEM: AWARENESS COURSE

COURSE OBJECTIVES On completion of the course, the participants will be able to appreciate the advantage of effectively combining multiple systems into a single format or structure while meeting the organisational objectives more efficiently
The course:
- Increases effectiveness of your systems by streamlining them
- Gives a comprehensive introduction to the key concepts of integrated Management Systems
- Gives greater focus on overall company objectives and makes it easy to prioritise on key issues
- Aims to provide awareness on all standards at one time
- Provides guidance and practical experience in planning, executing and
- reporting integrated audits in every audit cycle

ABOUT THE COURSE In an organisation, there are many systems that need to work together. Hence the need for an integrated management system. This course focuses on how one can benefit from an integrated system.

PARTICIPANTS Managers, officers and staff who are interested in enhancing organisational efficiency through effective integration of multiple systems.

DURATION One day

KEY TOPICS
- The most significant aspects of implementing: QMS, EMS & OHSAS
- How to create own set of IMS requirements including an outline programme, develop appropriate policy, objectives and targets
- How to document and implement effective IMS
- Blending elements of different standard together seamlessly

INTEGRATED MANAGEMENT SYSTEM: INTERNAL AUDITOR COURSE

COURSE OBJECTIVES

On completion of the course, the participants will be able to plan, execute and report Internal audits meeting the combined requirements of ISO 9001, ISO 14001 and ISO 18001.

ABOUT THE COURSE

When an integrated management system is being implemented in an organisation, the internal auditor plays a critical role. This course aims to provide practical guidance to the participants in planning, executing and reporting integrated audits- on all Standards at one time. The course provides with techniques and skills, enabling the participants to undertake structured audits that will jointly meet the combined requirements of ISO 9001, ISO 14001 and ISO 18001.

PARTICIPANTS

Managers, officers and staff with a clear understanding of the Standards: ISO 9001, ISO 14001 and ISO 18001 with experience as internal auditors in at least one of the systems.

DURATION

Three days

KEY TOPICS

- Guidance and Practical experience in planning, executing and reporting Integrated audits
- Skills, Knowledge & Techniques to undertake structured internal audits referencing the requirements of ISO 9001, ISO 14001, OHSAS 18001
- Importance of Integrated Management Systems and interrelation of clauses
- Audit trails through Intra and Inter Standards

OHSAS 18001: 2007 AWARENESS COURSE

COURSE OBJECTIVES

On completion, the participants will obtain an overview of -

- Requirements of OHSAS 18001:2007 standard.
- Occupational Health & Safety related Legal requirements.
- Objectives and Management Programs
- Hazard Identification and Risk Assessment.
- Implementation process for complying with the Standard
- Operational procedures; emergency preparedness & response plan.

ABOUT THE COURSE

The course will be delivered by highly experienced faculty, who are practicing Lead Auditors with hands-on experience in auditing against OHSAS 18001:2007 standard.

PARTICIPANTS

Managerial or supervisory-level personnel; shop or plant-level employees involved in execution or managing their business activities relating to manufacturing or delivery of related services, etc., to achieve organization's goals and objectives – who are interested in enhancing their contribution to Occupational Health & Safety Management System.

DURATION

One day

KEY TOPICS

- Introduction of Occupational Health and Safety Management System
- Introduction to clauses
- Documents, Records and Guideline for implementation
- Interrelation between Hazards, Risks and Operational Controls
- Interrelation between Unacceptable Risks and Management Program

OHSAS 18001: 2007 INTERNAL AUDITOR COURSE

COURSE OBJECTIVES

On completion of the course, the participants will be able to:

- Understand the requirements of OHSAS 18001:2007 Standard and related legal requirements
- Develop and implement OH & S Management System
- Carry out Hazard Identification and Risk Assessment
- Evolve operational control procedures and emergency preparedness and response plan
- Planning for an Audit
- Prepare audit checklist
- Conduct an Internal audit based on audit evidences
- Report Non-conformities and audit findings
- Close Non-conformities

ABOUT THE COURSE

Participants who have successfully passed the written examination will be awarded the 'Certificate of Successful Completion'. Others will be issued with the 'Certificate of Attendance'.

PARTICIPANTS

- Personnel with an aptitude for safety or those with relevant work experience intending to become a BS OHSAS Auditor
- BS OHSAS Consultants
- Process owners, who are directly involved in managing their activities from Manufacturing, Processing and Service industries.

DURATION

Two days

KEY TOPICS

- Introduction of Occupational Health and Safety Management System
- Purpose and Scope of an OH & S Management System.
- Introduction to OHSAS 18001:2007 requirements
- Identification of Hazard and Risk assessment.
- Introduction to clauses and auditing standard
- Auditing principles
- Auditing phases
- Recognising and report Non-Conformity against the requirement

OHSAS 18001: 2007 LEAD AUDITOR COURSE (NBQP & IRCA APPROVED)

COURSE OBJECTIVES

- To understand the requirements of Occupational Health and Safety Management System based on OHSAS 18001:2007 standards. To understand the OH & S related Legal requirements.
- To develop & implement OH & S Management System.
- To carry out Hazard Identification and Risk Assessment.
- To evolve operational control procedures and emergency preparedness & response plan.
- Describe the roles and responsibilities of auditors and Audit Team Leaders.
- Plan, prepare and conduct an audit in accordance with ISO 19011
- Report the audit findings, including writing non-conformity report
- Undertake audit follow-up activities, including evaluating the effectiveness of corrective action.

ABOUT THE COURSE

This course meets the NABET Criteria for OHSAS Lead Auditor Training. It equips the participants with knowledge and skills required to perform third party audit of management systems against OHSAS 18001:2007, in accordance with audit methodology of ISO 19011.

PARTICIPANTS

Management Representatives, Internal Auditors, Process Owners, Sub-Owners who are directly involved in managing their business activities in Manufacturing, Processing and Service industries. Potential OHSAS 18001:2007 Auditors and consultants

PRE- REQUISITES

Participants attending this course shall have adequate knowledge of OHSAS 18001:2007 Standards and prior knowledge of OHSAS auditing. It is also conveyed that no prior knowledge as above may lead to unsuccessful completion of this course.

DURATION

Five days

KEY TOPICS

- Introduction of Occupational Health and Safety Management System and introduction to OHSAS 18001:2007
- Identification of Hazard and Risk assessment, Safety & Health related legislation, Legal and other requirements.
- Audit Methodology, Questioning Techniques, Role and Responsibility of Auditor to collect and analyse evidence; objectivity.
- Non-conformity, Root Cause Analysis, Corrective action and effectiveness of corrective action. Incidents, Investigation and corrective actions

ISO 28001:2007 SECURITY MANAGEMENT FOR SUPPLY CHAIN: INTERNAL AUDITOR COURSE

COURSE OBJECTIVES

- The scope of ISO 28001: 2007- Security management Systems for the supply chain. Best Practices for implementing supply chain security, assessments and plans. Requirements and Guidance.
- Terms and Definitions. Field of Application.
- Steps in Supply Chain security process
- Security risk assessment; development of counter measures.
- Demonstration on conformance with ISO 28001through audits.
- Principles of Audit, Audit Process, Conducting/reporting audit findings.
- Continual Improvement.
- Responsibilities of Internal Auditors.

ABOUT THE COURSE

Participants who have successfully passed the written examination will be awarded the 'Certificate of Successful Completion'. Others will be issued with the 'Certificate of Attendance'.

PARTICIPANTS

- Professionals who intend to conduct internal audits with the knowledge & skills needed to assess and report on the conformance and effective implementation of processes.
- Professionals who intend to contribute to the continual performance improvement of the organization, which they represent.

DURATION

Two days

KEY TOPICS

- Introduction to the International Standard ISO 28000 & ISO 28001
- Requirements of C-TPAT, World Customs organization, European Union
- ISO 28000 - Series Requirement
- Security Risks Threats and Mitigation
- Security Assessment, Plan, Incident Response, Recovery & Planning
- Requirements of the specification for Security Management System for
- Supply chain as per ISO 28000:2007.
- Clause wise requirements
- ISO 28000 – Compliance Measures for audit Verification
- Security Assessment and Planning Audit

LEAN MANUFACTURING

COURSE OBJECTIVES

Help the organisations in eliminating non-value-added activities and processes by training and using lean tools

ABOUT THE COURSE

Lean manufacturing or lean production is a systematic method for the elimination of waste within a manufacturing system. Lean also takes into account, waste created through overburden and waste created through unevenness in workloads.

Working from the perspective of the client who consumes a product or service, "value" is any action or process that a customer would be willing to pay for. Lean processes aim to improve overall efficiencies by eliminating non-value adding activities.

The course is focused on giving a completely new perspective on manufacturing processes as a whole.

PARTICIPANTS

Senior and middle management, supervisors, foremen

DURATION

Two days

KEY TOPICS

- What is 5S?
- 5S in work environment
- Total Productive Maintenance (TPM)
- Single Minute Exchange of Die (SMED)
- Visual Stream Mapping (VSM)
- Root Cause & Corrective Action (RCCA)
- Skill matrix
- Tier meetings
- Examples and case studies in application of 5S concepts to achieve Lean Manufacturing

MEDIA HANDLING FOR THE MARITIME & OFFSHORE SECTORS

COURSE OBJECTIVES

This one-day, interactive workshop will inform participants about the new requirements on shipping media response and provide practical instructions on handling the media, including social media, in order to effectively influence public opinion after a major accident.

ABOUT THE COURSE

Maritime industry in general and shipping in particular, operate in a highly-regulated environment, which calls for high levels of compliance with globally-acceptable safety and environmental standards. However, accidents and incidents do occur from time to time and unfortunately, they attract negative attention from the media and the public.

Delivered by globally-renowned experts in the field, in a highly interactive workshop mode, this course focuses on enhancing the planning and preparations needed to deal effectively with any untoward accident or incident that has the potential to harm the public image of the organisation.

PARTICIPANTS

CEOs, COOs and Directors of shipping and ship management companies, port and terminals, offshore Exploration and Production (E&P) companies, and firms providing marine and o shore services.

Shipping companies: Crisis Managers, Senior Managers, Fleet Directors, Marine/Technical Superintendents, Insurance Managers, Communications/ Public Relations staff.

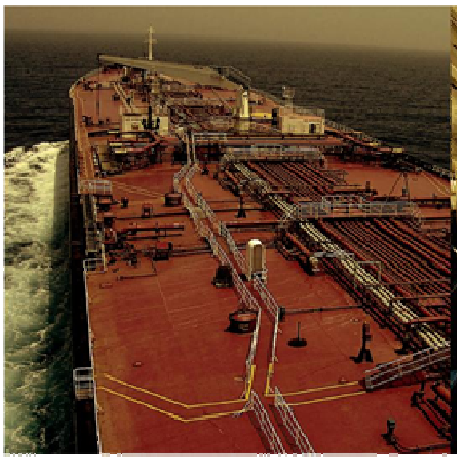
DURATION

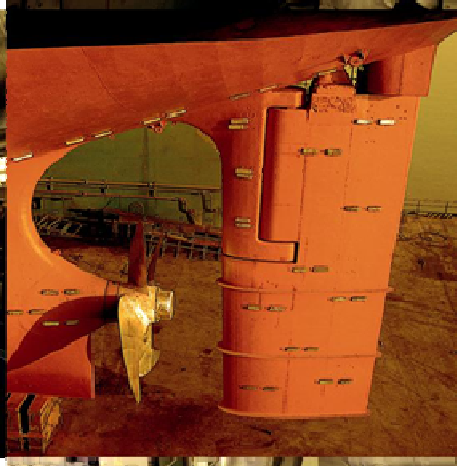
One day

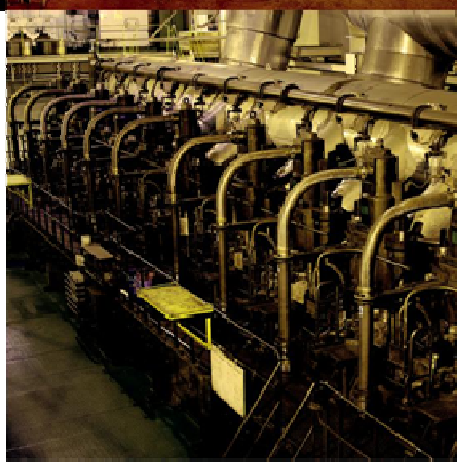
KEY TOPICS

- How to create a set of key messages to meet the regulatory regimes
- Preparing the required fact sheet and press releases
- Getting your messages across clearly to: media/ regulators/ authorities/ government agencies/ public interest groups/ pressure groups
- How to use social media effectively to communicate key company messages
- How to prepare for hostile media intrusion
- Preparing for TV and Broadcast interviews

For the latest course schedule and fee details please contact us or visit our website







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