



# SKILL DEVELOPMENT INITIATIVES by NATIONAL UNION OF SEAFARERS OF INDIA





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# NUSI Skill Development Initiatives



## Skill Development – The need of the hour!

The need for a skilled seafarer on-board has never been greater. Advancements in technology and rising costs necessitate having skilled team on-board to carry out as much maintenance and repairs in-house as possible.

While Indian seafarers have been a preferred lot in the International scenario, and the training systems of Ratings and Petty Officers have greatly improved over the years, the need for continuous enhancement of skills ever remains. At the national level too, there are initiatives by the Government to enhance the skills of Indians in general to make them global in their approach.

Recognising this need and based on the feedback from the industry, NUSI has taken several initiatives through its own training establishments and with the active support of shipowner's & long term partners committed to the cause of serving seafarers through skill development.

## Centres for Skills Development:

- **NUSI Offshore Training Institute (NOTI):** Though initially developed as a state of the art centre for Oil and Gas Offshore Training, NOTI has expanded its scope with addition of impressive practical skill development facilities. Located in the picturesque at the outskirts of Mumbai, over an 8 acres' campus, NOTI also provides residential facilities for candidates attending various programs.  

- **Mohamed Ebrahim Serang Centre (MESCC):** With an intention to enhance the skills of large number of seafarers, NUSI took the initiative to acquire a complete building of 12000 sq. ft. in 2017 to set up a modern Skill Development Centre for deck and engine ratings. This centre delivers the entire range of courses which are also available at NOTI.  

- **Don Bosco Institutions** Located in the heart of the city of Mumbai:
  - **College of Hospitality Studies:** DBCHS is well known for its excellent facilities for skill development plus a complete college for training in culinary skills.
  - **Maritime Academy:** DBMA has excellent facilities and faculty for various skill based training programs for seagoing ratings.

## Effective Quality Assured Courses!

Adopting a holistic approach to the entire process of skill development, NUSI has collaborated with Academic Partners of repute to ensure that a high-quality faculty team is involved in designing, developing and delivering courses for maximum effectiveness. Also included in the overall system are the administrative and logistics aspects which support quality education and training. In addition, all courses fall under the purview of well-known Maritime Training Provider (MTP) Standards of DNV.



# NUSI Skill Development Initiatives

## A Not-for-Profit Venture:

NUSI remains committed to the welfare of the seafarers that it proudly represents. All course offerings at the various centres are highly subsidised where the seafarers/company pay a nominal fee of INR 1000/- only for courses of duration up to 2 weeks. This subsidy on Courses comes from the active support of NUSI, NUSI/ITF Trust for Indian Seafarers, NMB Rehabilitation Trust and other related welfare institutions.

## Overview of Course Offerings:

The Various Skill Development Courses offered by the initiatives of NUSI centres include:

S.N.	Course Title	Course Details	Offered At
1	Pumpman's Skill Enhancement Training	<i>A comprehensive Course covering the entire spectrum of a Pumpman's role on-board tankers and associated skills, including the various workshop skills.</i> <ul style="list-style-type: none"><li>• 10 days/70 hours.</li></ul>	NUSI Offshore Training Institute (NOTI)
2	Deck Skills Enhancement Training	<i>A comprehensive Course covering the entire spectrum of a Deck Rating's role on-board ships and associated skills, including various deck skills, steering, crane operations, painting, carpentry, safety and environment protection, etc.</i> <ul style="list-style-type: none"><li>• 10 days/70 hours.</li></ul>	NUSI Offshore Training Institute (NOTI) and Mohamed Ebrahim Serang Centre (MESC)
3	Engine Skills Enhancement Training	<i>A comprehensive Course covering the entire spectrum of an Engine Rating's role on-board ships and associated skills, including the various engine room activities, safety, environment protection, workshop skills like welding and lathe operations.</i> <ul style="list-style-type: none"><li>• 10 days/70 hours.</li></ul>	NUSI Offshore Training Institute (NOTI) and Mohamed Ebrahim Serang Centre (MESC)
4	Lathe and Welding Skills Training	<i>A focused practical program meant for enhancement of a Fitter's skills in welding, gas cutting, lathe operations, etc.</i> <ul style="list-style-type: none"><li>• 6 days/42 hours.</li></ul>	NUSI Offshore Training Institute (NOTI) and Mohamed Ebrahim Serang Centre (MESC)
5	Fitter's Hard Skill Programme	<i>An extensive program to train fitters with relatively lesser experience. Program covers all aspects of a Fitters job on board.</i> <ul style="list-style-type: none"><li>• 18 days/108 hours</li></ul>	Don Bosco Maritime Academy.
6	Cook's Hard Skill Programme	<i>A comprehensive program to enhance the culinary skills of Cooks in line with MLC 2006 requirements.</i> <ul style="list-style-type: none"><li>• 16.5 days/100 hours</li></ul>	Don Bosco College of Hospitality Studies
7	English Language Communicative Skill Enhancement Training	<ul style="list-style-type: none"><li>• 15 days/ 45 hours for Seafarers with 30 participants per batch</li></ul>	Mohamed Ebrahim Serang Centre (MESC)

*Please find detailed information of all courses page 3 onwards.*



# NUSI Skill Development Initiatives

## Pumpman's Skills Enhancement Training



### Programme Objectives:

- Provide a complete understanding of the duties of a pumpman on board the vessel and confidence in their execution.
- To Refresh the basics of tanker & pump room operations and the knowledge of the hazards involved in the carriage of liquid cargoes and safe operation on tankers.
- Upgrade the knowledge of the candidate with regards to pumps, associated systems and efficient operation of the same.
- Improve the competence of the candidate in the use of special tools and precision equipment.
- Impart proficiency in carrying out basic maintenance and overhauling of cargo handling equipment.

### Programme Contents:

- General Tanker and Workshop Safety, Use of PPE, permit to Work System, Hazards of Liquid Cargo, Fire Triangle, Flammability Diagram, Flammable Range and Tool Box meetings.
- Tanker Layout and Operations - Cargo Systems Layouts on Conventional Pump Room Ships and Deepwell Pump Ships; Ballast Pumping Systems on Tankers, Ballast Water Exchange Regulations and Arrangements;  
COW, Tank Cleaning, Decantation, Discharge of Slops, Use of ODME, Inert Gas Systems
- Pumps and Pumping - Types, Principle of Operation, Construction and Pump Performance Curves. Pump  
Defects; Introduction to FRAMO and MARFLEX Pumping Systems, Components, Maintenance and Comparison with Pump Room Type Vessels, Stripping Systems – PRIMAVAC, AUS, Stripping Educators and Stripping using Compressed Air.
- Workshop Skills - Use of various hand tools, Specifications of Pipes, Valves, Flanges, Unions, etc.; Use of measuring Instruments, Machining Skills Workshop; Lathe Work, drilling and grinding, Welding Skills Workshop, and Pipe Fabrication.
- Practical Maintenance Skills – Valves: Types, Construction, Applications, Maintenance; Hydraulic Valve Actuators, Overhaul of different types of pumps, PV Valves, etc.

**Programme Highlights:** Hands on practical session in an indigenously developed Workshop Facility

**Programme Duration & Batch Size:** 10 days/70 hours. 8-10 candidates per batch

**Target Participants:** Existing Pumpman on board vessels who wish to enhance their skills further and other experienced ratings who may like to graduate to a pumpman's position.



# NUSI Skill Development Initiatives

## Deck Skills Enhancement Training



### Programme Objectives:

- To provide sufficient hands-on experience to candidates in order to develop / enhance their Deck Operational and Seamanship skills.
- To develop additional desirable skills in basic Carpentry and Plumbing on-board
- Basic introduction to Lathe, Welding and Gas cutting operations
- To understand the safety and procedural aspects associated with Deck Operations.

### Programme Contents:

- Personal and General Safety and Social Responsibility on-board / Aspects related to ISM, ISPS, Chemical Handling, etc., Basic Electrical Safety and safe use of Power tools.
- Revising aspects related to Personal Survival techniques, LSA and FFA on-board, Oil Spill Prevention-SOPEP, and dealing with emergencies on-board.
- Good seamanship practices, knots, splices and stoppers, Rigging of Pilot Ladders/ Jacob ladders, Blocs, sheaves, tackles etc. and Safe practices while mooring/unmooring, connecting tugs and anchoring.
- Precautions while entering enclosed spaces and safe working at heights.
- Refreshing the knowledge of different types of paints and their applications, including importance of surface preparation and entry level knowledge of Hydro blasting.
- Introduction of basic scaffolding, types of scaffolds and the dangers and hazards involved in scaffolding work.
- Safe Lifting Operations and Safe Crane operations (including Hands on practice on Crane Simulator).
- Introduction to Basic Carpentry and Plumbing along with use of various tools associated with the same.; Introduction to Gas Cutting, Welding and Lathe work practices and relevant Safety practices.
- Bridge watch keeping, Lookout duties, Bridge Teamwork including Basic Radio Telephony procedures and Hand-on practice on Steering Simulator is also included in the course
- Cargo handling, cargo watch and Hazmat /Types of cargoes, Safe cargo handling practices, Use of MSDS sheets, etc.

**Programme Highlights:** Hands on practical exercises in a well-designed Seamanship Workshop infrastructure

**Programme Duration & Batch Size:** 10 days. 8-10 candidates per batch

**Target Participants:** Deck Ratings employed on-board ships, who wish to develop / enhance their Deck operational and Seamanship Skills



# NUSI Skill Development Initiatives

## Engine Skills Enhancement Training



### Programme Objectives:

- To provide sufficient hands-on experience to candidates in order to develop / enhance their Engine Operational and Workshop skills.
- To develop additional desirable skills in Welding, Gas Cutting and Lathe Work on-board
- To understand the safety and procedural aspects associated with Engine Room Operations.

### Programme Contents:

- Personal and General Safety and Social Responsibility on-board / Aspects related to ISM, ISPS, Chemical Handling, etc., Basic Electrical Safety and safe use of Power tools.
- Revising aspects related to Personal Survival techniques, LSA and FFA on-board, Oil Spill Prevention- SOPEP, and dealing with emergencies on-board.
- Engine Room Operations, Relevant Log book entries, Oil Record Book, etc.
- Watch keeping procedures, Engine room round of all Machinery, checks and precautions.
- Good Workshop practices – tools & nomenclature and Workshop housekeeping & cleanliness; Routine E/R maintenance and overhauling aspects, etc.; Measuring Devices – (Pressure, Temperature, Level, etc.); Hydraulic and Pneumatic Safety
- Safe Handling of Chemicals used in the engine room (Boiler, Jacket Cooling water, FWG, etc.); Safe Bunker Operations
- Hands-on exercises in Gas Cutting operations, Welding Operations – SMAW (1F to 3F) and (1G to 3G) and Lathe operations such as Turning, Tapering, Tool Grinding, Pipe Jig, etc.

### Programme Highlights:

- Hands on practical exercises in a well-designed E/R- Lathe & Welding Workshop infrastructure

### Programme Duration & Batch Size:

- 10 days. 8-10 candidates per batch

### Target Participants:

- Engine Ratings employed on-board ships, who wish to develop / enhance their Engine operational and Workshop Skills



# NUSI Skill Development Initiatives

## Lathe and Welding Skills/Fitters Training

### Programme Objectives:

- To provide sufficient hands-on experience to candidates in order to develop/enhance their lathe and welding skills
- To develop additional desirable skills in Fabrication, Machining & Welding, and Improve the competence of the candidate in the use of special tools and precision equipment.
- To understand the general and machine specific safety precautions take for working on lathe & welding machines.



### Programme Contents:

- Identification and working concepts of lathe; Familiarization with different types of tools and measuring equipment used in lathe work.
- Procedure for carrying out Turning & Tapering, step turning, internal drilling and square thread cutting on lathe machines.
- Process of Selection and working principles of different types of welding machines; Understanding the basis of selection of electrodes and their applications.
- Aspects and procedures of practical cutting of plates using Gas Cutting.
- Concepts of SMAW welding and Single V Butt Joint on metal plates;
- Practical SMAW welding exercises in 1F to 3F & 1G to 3G positions.
- Practicing the proper process of cutting material for surfacing and sliding;
- Proper procedure for maintenance of tools and Safety Aspects / Precautions associated with Lathe and Welding operations
- Fitting Skills (This is covered only in the comprehensive Fitters Program)

### Programme Highlights:

- Hands on practical session in an indigenously developed Workshop Facility

### Programme Duration & Batch Size:

Programs are offered at two levels:

- 6 days' program as a refresher course for Fitters. 8-10 candidates per batch
- 18 days' program as a comprehensive program for development of Fitters. 12 Candidates per batch.

### Target Participants:

- Engine Ratings/Fitters employed on-board ships, who wish to develop / enhance their Lathe and Welding Skills





# NUSI Skill Development Initiatives

## Cooks Hard Skills Program



### Programme Objectives:

- *In compliance with MLC 20116 requirements to provide comprehensive underpinning knowledge and practical hands on experience to shipboard catering staff in entire range of Galley related activities.*

### Programme Contents:

- *Food Safety and Hygiene, Storing Food, Waste and Garbage Management and Pest Control*
- *Nutrition and Health, Balanced Menus*
- *Methods of Preparation of Vegetables, Fish & Meat*
- *Methods of Cooking*
- *Galley administration, management and supervision*
- *Prevention of food borne disease*
- *Egg & Breakfast Cookery, Indian, American & Continental Breakfast*
- *Preparation of Stocks, Soups, Sauces and their derivatives*
- *Preparing Cakes, Desserts and Cookies*
- *Indian/Sri Lankan/Indonesian/Chinese/Filipino Cuisine*
- *European Cuisine i.e. French/Italian/Polish*

### Programme Highlights:

- *Practical sessions to develop skills in variety of cuisines.*
- *Interaction with expert faculty who train 5 Star Hotel Staff.*
- *Special focus on food hygiene and safety as required by MLC 2006 Convention.*

### Programme Duration and Batch Size:

- *16.5 days/ 100 hours*

### Target Participants:

- *Seagoing Chief Cooks, Asst. Cooks, General Stewards.*



# NUSI Skill Development Initiatives

## Enhancement of Communicative Skills for Seafarers



### Programme Objectives:

- *Remove the hesitation and improve the confidence of seafarers and their families in articulating in English, the international language of the seafaring community.*
- *Get the participants to enjoy easy fluency in the use of the language.*
- *Fine tune the accuracy of delivery by inculcating grammar skills.*

### Programme Contents:

- *45-hour 2-module interactive course for seafarers.*
- *First 15-hour module on functional grammar or grammar driven spoken English.*
- *Second 30-hour module comprising of 15 narratives based speaking and 15 activity based speaking units.*
- *30-hour 1-module interactive course for seafarer's families.*
- *Module comprises of 15 vocabulary driven spoken English units and 15 grammar driven spoken English units.*

### Programme Highlights:

- *Interactive process using bilingual approach.*
- *Sentence building and using sentences in conversation.*
- *Grammar used functionally in conversation.*
- *Story based discussion and speeches*
- *English Games and Activities.*
- *Debates, Extempore and public speaking.*
- *Discussions and Presentations.*

### Programme Duration and Batch Size:

- *15 days/ 45 hours for Seafarers with 30 participants per batch*

### Target Participants:

- *Seafarers and their family members.*



# NUSI Skill Development Initiatives

## Emotional Wellness Enhancement Programme



### Programme Objectives:

- *Help manage and reduce the emotional stress of seafarers and their family members*
- *Promote overall emotional wellness through supportive, expert led psychological counselling.*
- *Teach skills for dealing with stress and improving emotional wellness*
- *Make help-seeking accessible so as to improve quality of life and productivity at work.*
- *Provide a complete understanding of the various stressors that affect their lives and ways to tackle them.*

### Programme Contents:

- *“NUSI SAHARA” is a one-to-one toll free number and chat service for 24 hours and seven days a week (24/7). Toll Free no- 1-800-300-26145 (in India)*
- *This service is available via Skype calls and chat for seafarers (outside India)*
- *In Person Training Session- the counsellors conduct in-person workshops and sessions for the seafarers which help them mitigate their stress and learn effective coping strategies.*
- *Training modules include- identifying reasons for stress, signs and symptoms, impact on work and personal life, and strategies to reduce stress*
- *Hands on techniques based in science which can improve coping on a day to day basis.*
- *Mindfulness and relaxation exercises which can be practised anywhere and at any time.*
- *Counsellors help seafarers manage various emotional and psychosocial problems such as workload, hectic activity, long-time separation from family-home, conflicts amongst the seafarer on board the ship and worry about future.*
- *Counsellors also support the family members, particularly the wives of the seafarers to talk about their stress in managing everything from schooling of children to finances and marriage related issues.*

### Programme Highlights:

- *Hands on practical techniques and tips that can be used to cope effectively with stress and enhance quality of professional and personal life. Topics touched upon in psychological sessions to seafarers and families include- conflict management, relaxation training, negative emotion management, team building, interpersonal relationship management, decision making, marital conflict management, improving self-confidence, positive attitude.*

### Programme Duration & Batch Size:

- *9 sessions every month for the benefit of seafarers and their family members*

### Target Participants:

- *Seafarers and family members*

*At **NUSI**, we constantly endeavour to provide  
Quality Training, that meet the Industry  
needs.*



*We can Customize Training courses to meet  
your specific needs!*

## **CONTACT DETAILS**

For Booking of all Courses except those at Don Bosco Institutes,  
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