1. Course Title: Able Seafarer Deck (ASD)

2. Scope With reference to convention Imo Model Course:

This course is intended for fresh trainees who have not previously served on board a ship to prepare them for working as deck ratings. This training, together with the basic Safety Training (STCW Code A-VI/1.2) and Company arranged Training will cover the mandatory minimum training requirement prescribed in Regulation VI/1 and II/4-2.2.2 of International Convention of Standards of Training, Certification and Watch keeping for Seafarers (STCW) (as amended) Code.

Main content of the course covers orientation and familiarization of ship in general and navigational bridge and deck, equipment therein in particular. This includes training on duties, functions, responsibilities and watch keeping in addition to Emergency, Safety and Survival.

3. Objective:

1. This Course will provide sufficient knowledge for a person intending to go to sea as a Deck Rating to operate and work on the shipboard machinery and systems typical of various types of merchant vessels in a safe and efficient manner.

2. On Successful completion of this Course, the participant should be able to:
   a. Understand a deck rating's responsibilities as an efficient member of the operational team in Watch keeping and navigational bridge operations.
   b. Describe safe working practices and procedures during mooring and anchoring operations.
   c. Describe the operation and maintenance of deck equipment, rope and wirework.
   d. Understand the safety requirements and precaution associated with various types of modern merchant vessels.

4. Course Outline Shore base & On board Training:

Function 1: Navigation at the support level

REF.	COMPETENCE	HOURS
1.1	Contribute to a safe navigational watch	10.50
1.2	Contribute to berthing, anchoring and other mooring operations	7.50

Function 2: Cargo handling and stowage at the support level

REF.	COMPETENCE	HOURS
2.1	Contribute to the handling of cargo and stores	6.00

Function 3: Controlling the operation of the ship and care for persons on board at the support level

REF.	COMPETENCE	HOURS
3.1	Contribute to the safe operation of deck equipment and machinery	19.5
3.2	Apply occupational health and safety precautions	12.75
3.3	Apply precautions and contribute to the prevention of pollution of the marine environment	3.75
3.4	Operate survival craft and rescue boats	Ancillary course

Function 4: Maintenance and repair at the support level

REF.	COMPETENCE	HOURS
4.1	Contribute to shipboard maintenance and repair	10.00

TOTAL **70**

5. Competence Standard/Course Syllabus Checked with up-to-date STCW/IMO Model Course:

1.1 CONTRIBUTE TO A SAFE NAVIGATIONAL WATCH

1.1.1 Ability to understand orders and to communicate with the officer of the watch on matters relevant to watch keeping duties – 4.50 hours

REF.	REQUIRED PERFORMANCE	
1.1.1.1	**Keeping look-out**	1.50
	– explains the importance of keeping a look-out by sight and hearing – describes the responsibilities of a look-out – states that look-out should be maintained by both sight and hearing all around of the vessel and position should be changed from one bridge wing to the other frequently – states that look-out should be maintained for any type of object, light or sound signal – explains reporting of the approximate bearing of an object, light and sound signal in degrees or points – states that the attention required for keeping lookout varies with the time of the day and weather conditions – states that any deterioration of visibility should be reported to the OOW immediately	
1.1.1.2	**Steering the vessel**	1.50
	– demonstrates the understanding of the helm orders given in English – reports the helm angle and ship's heading in proper manner – describes the procedures in steering the vessel while manoeuvring with pilot on board	
1.1.1.3	**Departure and arrival procedures**	1.50
	– demonstrates the use of signal and national flags – explains how to receive and see-off pilots – explains matters to attend in the bridge while pilot in the bridge and during manoeuvring	

1.1.2 Procedures for the relief, maintenance and handover of a watch – 4.50 hours

REF.	REQUIRED PERFORMANCE	
1.1.2.1	**Maintenance of navigational watch**	1.50
	– describes the duties and responsibilities during a navigational watch	
1.1.2.2	**Relief during the watch**	1.50
	– describes the procedures to be followed for relief during a navigational watch	
1.1.2.3	**Handover of the watch**	1.50
	– describes the procedures to be followed for handing over a navigational watch to the next watch-keeper	

1.1.3 Information required maintaining a safe watch – 1.50 hours

REF.	REQUIRED PERFORMANCE	
1.1.3.1	**Information**	1.50
	– lists the information required to maintain a navigational watch, e.g., the heading of the vessel in magnetic and gyro compass, course to steer by hand steering/set in the auto pilot, status of navigational lights, if sound signal is set on auto mode for poor visibility, if there is any extra look-out, the status of traffic around the vessel etc.	

1.2 CONTRIBUTE TO BERTHING, ANCHORING AND OTHER MOORING OPERATIONS

1.2.1 Working knowledge of the mooring system and related procedures – 6.00 hours

REF.	REQUIRED PERFORMANCE	
1.2.1.1	**The function of mooring and tug lines and how each line functions as part of an overall system**	1.50
	– identifies various types of synthetic mooring ropes and their characteristics – describes the use of synthetic ropes and wire ropes for using as tug line – explains the purpose of headlines/stern lines, breast line and back spring used for berthing a vessel – describes the precautions to be taken during the mooring operation and making fast the tug line	
1.2.1.2	**The capacities, safe working loads, and breaking strengths of mooring equipment, including mooring wires, synthetic and fibre lines, winches, anchor windlasses, capstans, bitts, chocks and bollards**	1.50
	– describes the construction of natural fibre ropes, synthetic ropes and wire ropes – defines the breaking strength and safe working load of various types of mooring ropes and wire ropes – solves numerical problems for SWL of various types and construction of synthetic & natural ropes and wire ropes – identifies the load bearing capacities marked on the anchor windlasses, capstans, bitts, chocks and bollards – explains the purpose of capstans, bitts, chocks, bollards and fairleads – indentifies the dangers of overloading the mooring lines and mooring equipment	
1.2.1.3	**The procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines**	1.50
	– lists the steps required in making fast and letting go the mooring and tug lines – demonstrates the order of events for making fast and letting go mooring lines, tug lines and towing lines	
1.2.1.4	**The procedures and order of events for the use of anchors in various operations**	1.50
	– identifies various types of anchors and anchor chains – explains the operation of windlass while anchor handling – describes the use of anchors for various operations – lists the order of events during letting go anchor and heaving up anchor – distinguishes between dropping anchor from the hawse pipe and from cock a bill position	

1.2.2 Working knowledge of the procedures and order of events associated with mooring to a buoy or buoys – 1.50 hours

REF.	REQUIRED PERFORMANCE	
1.2.2.1	**Mooring to buoys**	1.50
	– shows the configuration of mooring lines used for making fast to single mooring buoys and pair of buoys – lists the order of events while making fast to mooring buoys at the forward and aft of a vessel	

2.1 CONTRIBUTE TO THE HANDLING OF CARGO AND STORES

2.1.1 Knowledge of procedures for safe handling, stowage and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids – 4.50 hours

REF.	REQUIRED PERFORMANCE	
2.1.1.1	**Handling of cargo**	1.50
	– lists the various types of dry cargo in packaged form and in bulk – describes the special characteristic associated with handling of each type of cargo in packaged form and in bulk – lists the various types of containers carried on board vessels and describes apparent damages associated with containers – lists the various types of liquid cargo carried in tankers – explains the basic idea of loading and discharging procedures of various types of liquid cargo – demonstrates the identification of dangerous goods as per the IMDG Code Classification table. – outlines the characteristics of dangerous, hazardous and harmful substances – states that any exceptional external condition of cargo and any significant marking of the packaged cargo should be brought to the notice of the OOW	
2.1.1.2	**Stowage and securing of cargo**	1.50
	– summarizes the importance of proper stowage and securing of the cargo in the holds and on deck of vessels – lists the various methods of stowage and securing of various types of cargo in the cargo hold and on deck of the vessels, including containers – states that the stowage of dangerous, hazardous and harmful substances is very important – states that the stowage and securing of the cargo should be as per the shipboard instructions	
2.1.1.3	**Handling and stowage of stores**	1.50
	– states that stores should be received as per the requirement of the vessel and should be in intact condition – states that any tampering of the packaging of stores should be reported to the OOW – states that any special marking on the packaging of the stores should be brought to the notice of the OOW – states that the stores to be stowed in the designated store rooms.	

2.1.2 Basic knowledge of and precautions to observe in connection with particular types of cargo and identification of IMDG labelling – 1.50 hours

REF.	REQUIRED PERFORMANCE	
2.1.2.1	**Particular types and IMDG cargo**	1.50
	– lists the particular types of cargo require precautions to be observed for handling and stowage – describes the precautions during handling and storage of the particular types of cargo – Identifies IMDG labelling – lists dangers and precautions associated with each type of IMDG Classification of cargo	

3.1 <u>CONTRIBUTE TO THE SAFE OPERATION OF DECK EQUIPMENT AND MACHINERY</u>

3.1.1 Knowledge of deck equipment – 9.00 hours

REF.	REQUIRED PERFORMANCE	

3.1.1.1	**Function and uses of valves and pumps, hoists, cranes, booms, and related equipment**	1.50
	– describes the function and uses of valves and pumps, hoists, cranes, booms, and related equipment	
3.1.1.2	**Function and uses of winches, windlasses, capstans and related Equipment**	1.50
	– describes the function and uses of winches, windlasses, capstans and related equipment	
3.1.1.3	**Hatches, watertight doors, ports, and related equipment**	1.50
	– describes the function and uses of hatches, watertight doors, ports, and related equipment	
3.1.1.4	**Fibre and wire ropes, cables and chains, including their construction, use, markings, maintenance and proper stowage**	1.50
	– Outlines the construction, use, maintenance and proper stowage of fibre and wire ropes – Outlines the construction, use, markings, maintenance and proper stowage of cables and chains	
3.1.1.5	**Ability to use and understand basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists**	1.50
	– Demonstrates the use of basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists	
3.1.1.6	**Ability to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies**	1.50
	– Shows how to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies	

3.1.2 Knowledge of rigging and rope work – 4.50 hours

REF.	REQUIRED PERFORMANCE	
3.1.2.1	**Rig and unrig bosun's chairs and staging**	1.50
	– demonstrates the rigging and unrigging of bosun's chairs and staging	
3.1.2.2	**Rig and unrig pilot ladders, hoists, rat-guards and gangways**	1.50
	– demonstrates the rigging and unrigging of pilot ladders, hoists, rat-guards and gangways	
3.1.2.3	**Use marlin spike seamanship skills, including the proper use of knots, splices and stoppers**	1.50
	– demonstrates the use of marlin spike seamanship skills, including the proper use of knots, splices and stoppers	

3.1.3 Use and handling of deck and cargo-handling gear and equipment – 4.50 hours

REF.	REQUIRED PERFORMANCE	
3.1.3.1	**Access arrangements, hatches and hatch covers, ramps, side/bow/stern doors or elevators**	1.50
	– describes the basic construction and operation of access arrangements, hatches and hatch covers, ramps, side/bow/stern doors or elevators – lists the precautions to be taken during operation of these equipment – demonstrates the handling of access arrangements, hatches and hatch covers, ramps, side/bow/stern doors or elevators	
3.1.3.2	**Pipeline systems – bilge and ballast suctions and wells**	1.50

	– identifies various types of cargo pipeline systems – describes the purpose of bilge system and wells for cargo spaces – prepares simplified sketches for bilge and ballast pipeline systems – labels suctions and wells in the sketches for bilge and ballast pipeline systems	
3.1.3.3	**Cranes, derricks, winches**	1.50
	– distinguishes between the functions of cranes and derricks – names the main parts of cranes and derricks – identifies the winches, blocks and shackles in a derrick system – demonstrates the safe operation of cranes and derricks during loading and discharging of cargo – lists the dangers associated with the operation of cranes, derricks and cargo winches	

3.1.4 Knowledge of hoisting and dipping flags and the main single-flag signals. (A, B, G, H, O, P, Q) – 1.50 hours

REF.	REQUIRED PERFORMANCE	
3.1.4.1	**Flags and flag signaling**	1.50
	– explains the use of the ensign and national flags – list the circumstances for dipping flags – identifies the A, B, G, H, O, P & Q signal flags – explains the use of these flags	

3.2 APPLY OCCUPATIONAL HEALTH AND SAFETY PRECAUTIONS

3.2.1 Working knowledge of safe working practices and personal shipboard safety – 12.75 hours

REF.	REQUIRED PERFORMANCE	
3.2.1.1	**Working aloft**	1.50
	– lists the preparations to be taken prior to working aloft – describes the precautions to be taken while working aloft	
3.2.1.2	**Working over the side**	1.25
	– describes the preparations to be taken prior to working over the side – describes the precautions to be taken while over the side	
3.2.1.3	**Working in enclosed spaces**	1.25
	– lists the preparations to be taken prior to working in enclosed spaces – describes the precautions to be taken while working in enclosed spaces	
3.2.1.4	**Permit to work systems**	1.25
	– explains the use of permit to work system – lists the circumstances when the permit to work system to be used	
3.2.1.5	**Line handling**	1.25
	– lists the dangers with line handling – describes the precautions to be taken during line handling	
3.2.1.6	**Lifting techniques and methods of preventing back injury**	1.25
	– lists the dangers with lifting loads in improper manner – demonstrates the lifting techniques and methods of preventing back injury	
3.2.1.7	**Electrical safety**	1.25
	– lists the dangers with electric current – describes the precautions to be taken while handling electrical lines and electric equipment	
3.2.1.8	**Mechanical safety**	1.25

	– outlines the mechanical safety matters on board a ship – describes the precautions to be taken to avoid injury from mechanical means	
3.2.1.9	**Chemical and biohazard safety**	1.25
	– outlines the chemical hazards and bio hazards – describes the actions to avoid chemical hazards and bio hazards	
3.2.1.10	**Personal safety equipment**	1.25
	– lists the personal safety equipment to be used on board while at work – describes the dangers associated with not using the personal safety equipment	

3.3 APPLY PRECAUTIONS AND CONTRIBUTE TO THE PREVENTION OF POLLUTION OF THE MARINE ENVIRONMENT

3.3.1 Knowledge of the precautions to be taken to prevent pollution of the marine environment – 1.25 hours

REF.	REQUIRED PERFORMANCE	
3.3.1.1	**Pollution prevention**	1.25
	– lists the materials causes pollution to the marine environment – lists the on board operations that causes marine pollution – explains the disposal procedures of materials on board to prevent marine pollution – describes the operational precautions taken on board for preventing marine pollution.	

3.3.2 Knowledge of the use and operation of anti-pollution equipment – 1.25 hours

REF.	REQUIRED PERFORMANCE	
3.3.2.1	**Anti-pollution materials and equipments**	1.25
	– lists the anti-pollution materials and equipment used on board ships – describes the purpose of the SOPEP store and the use of the materials in the SOPEP store. – outlines the use of anti-pollution equipment available on board	

3.3.3 Knowledge of the approved methods for disposal of marine pollutants- 1.25 hours

REF.	REQUIRED PERFORMANCE	
3.3.3.1	**Disposal of marine pollutant**	1.25
	– defines marine pollutant – identifies marine pollutant – describes the approved methods of disposal of marine pollutants	

3.4 OPERATE SURVIVAL CRAFT AND RESCUE BOATS

3.4.1 Knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment

See IMO Model Course No 1.23 and STCW 1978 as amended Regulation VI/2

3.4.2 Knowledge of survival at sea techniques

Ancillary courses for basic training

4.1 CONTRIBUTE TO SHIPBOARD MAINTENANCE AND REPAIR

4.1.1 Ability to use painting, lubrication and cleaning materials and equipment- 3.75 hours

REF.	REQUIRED PERFORMANCE	
4.1.1.1	**Painting**	1.25
	– outlines the purpose of paint application on board the ships – names the main types of paint based on their application – describes the use of various types of paint application brush, roller and spray equipment	

	– names the various paint schemes for hull and deck area	
4.1.1.2	**Lubrication**	1.25
	– explains the purpose of lubrication – identifies various types of lubrication equipment on board – identifies main lubrication points on the deck machinery – describes the use of various types of lubrication equipment – states that lubrication of equipment and moving parts to be carried out at regular intervals and as per the maintenance plan of the vessel	
4.1.1.3	**Cleaning materials**	1.25
	– names the cleaning material and equipment used on board vessels – outlines the use of cleaning materials – describes the use of cleaning equipments – outlines the maintenance of cleaning equipment	

4.1.2 Ability to understand and execute routine maintenance and repair procedures – 1.25 hours

REF.	REQUIRED PERFORMANCE	
4.1.2.1	**Routine repair and maintenance**	1.25
	– outlines the planned maintenance system (PMS) on board vessels – identifies the frequency of routine repair and maintenance of the major deck items – states that shipboard instructions are to be followed for repair and maintenance of deck equipment – states the precautions applicable to the working condition to be followed during the repair and maintenance on board	

4.1.3 Knowledge of surface preparation techniques – 1.25 hours

REF.	REQUIRED PERFORMANCE	
4.1.3.1	**Surface preparation**	1.25
	– explains the significance of surface preparation – lists the surface preparation methods – describes the techniques for each method	

4.1.4 Understanding manufacturer's safety guidelines and shipboard instructions – 1.25 hours

REF.	REQUIRED PERFORMANCE	
4.1.4.1	**Manufacturer's guidelines and shipboard instructions**	1.25
	– explains the importance of following the manufacturer's safety guidelines and shipboard instructions – states that the manufacturer's safety guidelines/shipboard instructions to be strictly followed prior to using any material & equipment and prior to repair/maintenance of any equipment	

4.1.5 Knowledge of safe disposal of waste materials – 1.25 hours

REF.	REQUIRED PERFORMANCE	
4.1.5.1	**Disposal of waste material**	1.25
	– explains the dangers associated with the disposal of shipboard waste materials – states that for disposal of waste materials the shipboard instructions to be strictly followed	

4.1.6 Knowledge of the application, maintenance and use of hand and power tools – 1.25 hours

REF.	REQUIRED PERFORMANCE	
4.1.6.1	**Hand and power tools**	1.25
	– lists the major hand and power tools used on board ships – states that the tools are to be in sound condition before using – states that for the power tools the use and maintenance should be as per the manufacturer's instruction – states that defective tools should not be used	

6. Entry Standard, Selection Criteria of Students:
Passed secondary School Certificate
Age limits: 16-20 years.

7. Intake limitation, with specific mention Instructor-student ratio:
For practical Exercises student/teacher ration should not exceed 10:1

8. Qualification and experience of instructors:
Minimum qualification of any instructor must be class 4 Deck officers Certificate of Competency or equivalent with relevant sea experience.

9. Qualification and experience of assessors: The practical exercises must be conducted and achievement of competency must be assessed under the supervision of a retained or serving fire fighter (or a person with equivalent qualifications and experience). The person conducting the practical training must be in possession of a recognized First Aid qualification. The ratio of staff to students for the practical exercises involving live fires or the use of breathing apparatus should not exceed 1:8.

10. Details Facilities & Equipment, materials and resources available for the training; Visual aids lecture Notes, Library facilities, Rental documents, Workshops Training Equipment: Navigational, Engineering, Communication, Seamanship etc:
Normal classroom facilities with an overhead projector must be available. VCR, television and instructional videotapes are highly recommended. The demonstration room/laboratory will be required to contain the following items/models of items cross- sectioned for inspection or poster size drawings/photographs of the same so that the main components are visible:

I. Navigational Bridge equipment.
II. Modern derricks and cranes.
III. Mooring and anchoring equipment.
IV. Various types of vessels.
V. Tools, cargo slings and cargo handling equipment.
VI. Copies of COSWP for Merchant Seamen and labels for dangerous good.

11. Conduct of Training with number of classroom lectures, practical work use of simulator, video etc:
To be in corporated.

12. Total duration of Training; Duration of Practical's:
Total- 70.0 hrs.
Practical- 10. hrs.

13. Assessment procedure, whether independent of instruction or continuous performance evaluation:
Short answer, multiple choices, fills in the blanks, hot spot, true/false and sketch labeling type questions in a written test are used for assessment. Practical assessment includes direct observation, oral questioning, role-play and demonstration of ability under realistic situation.

14. Formats of certificate to be issued with correct reference to STCW and reference to approval and authorization by the Department of Shipping and contact point of the issuing institution for verifying authenticity:

Cert No: 2017.02.009.0002895 DoS Reg. No: 2017.02.009.0073742

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

ন্যাশনাল মেরিটাইম ইন্সটিটিউট

NATIONAL MARITIME INSTITUTE

South Halishahar, P.O. Bandar, Chittagong-4100, Bangladesh.
Phone : +88-031-740569, Fax : +88-031-800620, E-mail : info@nmi.gov.bd

Course Completion Certificate

RATING AS ABLE SEAFARER DECK

This is to certify that, Mr. MD. ABU SUFIAN Son of Mr. MD. ARAD ULLAH, Date & Place of Birth 01-12-1985 & CHITTAGONG, C.D.C.No. T/30250 has successfully completed course on **RATING AS ABLE SEAFARER DECK** conducted from **29-10-2017** to **09-11-2017** at the National Maritime Institute, Chittagong, Bangladesh

Issue Date: 09-11-2017 and Expiry Date 09-11-2022

Has been found duly qualified and satisfied the condition in accordance with the provisions of Regulation II/5 of Annex to the international convention on standards of Training, certification and watch keeping for seafarers(STCW), 1978 as amended.

CERTIFIED TRAINING INSTITUTE

Signature of the Holder

Principal

to verify this certificate visit- www.nmi.gov.bd

15. Maintenance of records in Data-base for facilitation of checking including assessments:

NMI will maintain a data-base of all the students who have completed the course. The following records for each individual will be kept so as to ensure that the certificate is issued to a candidate who has met the requirements as laid down by the governing authority regarding issuance of a certificate on Bridge Resource Management.

- Application form
- Assessment papers after completion of course

- Attendance Sheet
- Attested Xerox copy of the issued certificates & licenses
- A registered data-base in hard copy and soft form

16. Internal Quality Standard System if any. Students Impressions, past results:

The institute maintains quality standard system ISO 9001:2008, Certified by DNV GL

17. Course notice served, course conducted as per course notice, progression report served:

Will be complied as per DOS Instruction.

18. Attendance of Students and Instructors:

Students and Instructor attendance sheet attached.

Annex- 03

NATIONAL MARITIME INSTITUTE

TRAINING RECORD

Instructor:

Venue:

Subject:

Brief description on training material:

Attendance:

Name & rank	Sign	Name & rank	Sign	Name & rank	Sign

Signature
Management Representative

Signature
Principal