1. Course Title: Able Seafarer Engine (ASE)

2. Scope With reference to convention Imo Model Course:

The scope of the course is the training requirement of Section A-VI/3 of the STCW Code.

3. Objective:

The objective of this course is to train the personnel to make them capable of demonstrating the required minimum standard of competence set out in Table A-VI/3 of STCW '78 as amended for seafarers who may be designated to control fire-fighting operations.

4. Course Outline Shore base & On board Training:

SL	KNOWLEDGE, UNDERSTANDING & PROFICIENCY	Class room Lecture /hrs
1	Contribute to a safe engineering watch	7.5
2	Contribute to the monitoring and controlling of an engine-room watch	7.5
3	Contribute to fuelling and oil transfer operations	6.0
4	Contribute to bilge and ballast operations	3.0
5	Contribute to the operation of equipment and machinery	12.0
6	Safe use of electrical equipment	3.75
7	Contribute to shipboard maintenance and repair	9.75
8	Contribute to the handling of stores	6.0
9	Apply precautions and contribute to the prevention of pollution of the marine environment	3.75
10	Apply occupational health and safety procedures	7.5
11	**Assessment**	**3.25**
	Total	**70**

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

SL	KNOWLEDGE, UNDERSTANDING & PROFICIENCY	Class room Lecture /hrs
1	**1. CONTRIBUTE TO A SAFE ENGINEERING WATCH** 1.1 Ability to understand orders and to communicate with the officer of the watch in matters relevant to watchkeeping duties 1.2 Procedures for the relief, maintenance and handover of a watch 1.3 Information required to maintain a safe watch	7.5
2	**2. CONTRIBUTE TO THE MONITORING AND CONTROLLING OF AN ENGINE-ROOM WATCH** 2.1 Basic knowledge of the function and operation of main propulsion and auxiliary machinery 2.2 Basic understanding of main propulsion and auxiliary machinery control pressures, temperatures and levels	7.5
3	**3. CONTRIBUTE TO FUELLING AND OIL TRANSFER OPERATIONS** 3.1 Knowledge of the function and operation of fuel system and oil transfer operations	6
4	**4. CONTRIBUTE TO BILGE AND BALLAST OPERATIONS** 4.1 Knowledge of the safe function, operation and maintenance of the bilge and ballast systems	3

5	**5. CONTRIBUTE TO THE OPERATION OF EQUIPMENT AND MACHINERY** 5.1 **Safe operation of equipment** **5.2 Ability to use and understand basic crane, winch and hoist**	12
6	**6. SAFE USE OF ELECTRICAL EQUIPMENT** 6.1 Safe use and operation of electrical equipment 6.2 Knowledge of the causes of electric shock and precautions to be observed to prevent shock	3.75
7	**7. CONTRIBUTE TO SHIPBOARD MAINTENANCE AND REPAIR** 7.1 Ability to use painting, lubrication and cleaning materials and equipment 7.2 Ability to understand and execute routine maintenance and repair procedures 7.3 Knowledge of surface preparation techniques 7.4 Knowledge of safe disposal of waste materials 7.5 Understanding manufacturer's safety guidelines and shipboard instructions 7.6 Knowledge of the application, maintenance and use of hand and power tools and measuring instruments and machine tools 7.7 Knowledge of metalwork	9.75
8	**8. CONTRIBUTE TO THE HANDLING OF STORES** 8.1 Knowledge of procedures for safe handling, stowage and securing of stores	6
9	**9. APPLY PRECAUTIONS AND CONTRIBUTE TO THE PREVENTION OF POLLUTION OF THE MARINE ENVIRONMENT** 9.1 Knowledge of the precautions to be taken to prevent pollution of the marine environment 9.2 Knowledge of use and operation of anti-pollution equipment 9.3 Knowledge of approved methods for disposal of marine pollutants	3.75
10	10. Apply occupational health and safety procedures 10.1 Working knowledge of safe working practices and personal shipboard safety	7.5
11	**Assessment**	**3.25**
	Total	**70**

6. Entry Standard, Selection Criteria of Students:

A candidate must have SSC or higher certificate, with science back ground.
Age: More than 16 years.
Health: Good health condition to be certified by a qualified doctor

7. Intake limitation, with specific mention Instructor-student ratio:

For practical exercises student/teacher ratio should not exceed 10:1

8. Qualification and experience of instructors:

Minimum qualification of any instructor must be Class 4 Marine Engineer officer certificate of competency or equivalent with relevant sea experience.

9. Qualification and experience of assessors: Minimum qualification of any instructor must be Class 4 Marine Engineer officer certificate of competency or equivalent with relevant sea experience.

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 Video Tapes 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:

1. Diesel and Steam Engines.
II. Boilers
III. Reciprocation air compressors and their safety valves.
IV. Various types of pumps.
V. Plate and tubular heat exchanger
VI. Valves: gate, Globe, butterfly, spring loaded, screw down and non-return type.

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

Period → Day ↓	0900-0945	0945-1030	1030-1115	1115-1145	1145-1230	1230-1315	1315-1400	1400-1500	1500-1545	1545-1630	1630-1715	1715-1800
1st Day	Safe Engineering Watch (SR)			Tea Break	Monitoring & controlling of E/R watch (MK)			Launch Break	Safe use of electrical equipment (MK)		Prevention of pollution in marine environment (SR)	
2nd Day	Safe Engineering Watch (SR)				Monitoring & controlling of E/R watch (MK)				Handling of stores (SR)		Occupational health and safety procedures (SR)	
3rd Day	Fuelling & oil transfer operation (SP)				Handling of stores (SP)				Fuelling & oil transfer operation (SR)			
4th Day	Fuelling & oil transfer operation (SR)				Operation of equipment & machinery (MK)				Ship board Maintenance and Repair (SP)			
5th Day	Bilge & ballast operation (SP)				Safe use of electrical equipment (MK)				Occupational health and safety procedures (SP)			
6th Day	Operation of equipment & machinery (MK)				Ship board Maintenance and Repair (SR)				Occupational health and safety procedures (SR)			
7th Day	Operation of equipment & machinery (MK)				Ship board Maintenance and Repair (SR)				Safe Engineering Watch (SP)			
8th Day	Operation of equipment & machinery (MK)				Handling of stores (SR)				Monitoring & controlling of E/R watch (SP)			
9th Day	Ship board Maintenance and Repair (MK)				Prevention of pollution in marine environment (SP)				Operation of equipment & machinery (SP)			
10th Day	Revision (MK)				Assessment (SR)							

12. Total duration of Training; Duration of Practical's:
Theory- 20.75 hrs.
Practical- 7.75 hrs.
Assessment- 3.0 hrs.

13. Assessment procedure, whether independent of instruction or continuous performance evaluation:
The training is organized so that, by demonstration, trainees are able to show that they meet the requirements of below mentioned column 2 of Table A-VI/3 in accordance with the methods for demonstrating competence shown in column 3 of that table and the criteria for evaluating competence in column 4, by short answer, multiple choice, fill in the blanks and true/false type questions written test and by practical assessment, direct observation, oral questioning, simulation in practical test.

In case of failure, the student will be readmitted to the next batch of student.

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: 2016.02.017.0000080 DoS Reg. No: 2016.02.017.0007454

Course Completion Certificate

RATING AS ABLE SEAFARER ENGINE

This is to certify that, Mr. ANIK BARUA Son of Mr. PRIODERSHI BARUA, Date & Place of Birth 08-03-1993 & COX'S BAZAR, C.D.C.No. C/O/6852 has successfully completed course on **RATING AS ABLE SEAFARER ENGINE** conducted from **28-08-2016** to **08-09-2016** at the National Maritime Institute, Chittagong, Bangladesh

Issue Date: 25-09-2016 and Expiry Date 25-09-2021

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

CERTIFIED
TRAINING INSTITUTE

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