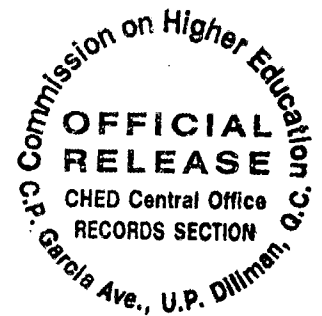


Republic of the Philippines  
OFFICE OF THE PRESIDENT  
**COMMISSION ON HIGHER EDUCATION**



**CHED MEMORANDUM ORDER (CMO)**  
**No. 13**  
**Series of 2013**

SUBJECT: ***POLICIES, STANDARDS AND GUIDELINES (PSG) FOR THE BACHELOR OF SCIENCE IN MARINE TRANSPORTATION PROGRAM***

In accordance with the pertinent provisions of Republic Act (RA) No. 7722, otherwise known as the "Higher Education Act of 1994", the 2010 Manila Amendments to the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (1978 STCW Convention), by virtue of the 412<sup>th</sup> Commission *en banc* Resolution No. 362-2013 dated 14 May 2013, and for the purpose of rationalizing maritime education in the country, with the end in view of keeping it at par and responsive to the latest international trends and requirements of the industry, this set of policies, standards and guidelines for the education and training program of Marine Deck Officers pursuant to Regulation II/1, Chapter II of the 1978 STCW Convention as amended, are hereby adopted and promulgated by the Commission, thus:

**ARTICLE I**  
**INTRODUCTION**

**Section 1. Rationale and Background**

The 2005 revised Policies, Standards and Guidelines (PSGs) governing the operation of maritime programs in the country emerged as a result of careful review and consolidation of the three (3) PSGs implemented by the Commission on Higher Education (CHED) from 1997 to 1999. These are CMO 51, s. 1997, CMO 38, s. 1998 and CMO 10, s. 1999. Said revision was undertaken by qualified technical experts from the academe, industry, professional organizations, government concerned agencies and other stakeholders, making sure that the national standards and STCW requirements and such other international laws and conventions are incorporated.

However, the 2010 amendments (the Manila Amendments) to the STCW 1978 Convention and Code were adopted by a conference of parties to the STCW

convention, held in Manila, Philippines from 21 to 25 June 2010. The Manila amendments updated standards of competence required of marine deck officers at the operational level particularly, in light of emerging technologies, new training and certification requirements and methodologies, and medical fitness standards for seafarers among others, and ultimately for shipping companies to have a safe, secure and efficient shipping operation on cleaner oceans.

Thus, in view of the foregoing and in furtherance of the ongoing paradigm shift to learning competency based standards in Philippine higher education, the Commission finds it imperative to develop an undergraduate degree program in marine transportation which shall be attuned to national academic standards, industry needs and international maritime standards.

## **ARTICLE II PROGRAM OPERATION AND AUTHORIZATION**

### **Section 2. Authority to Operate**

The Bachelor of Science in Marine Transportation program shall only be operated by a higher education institution (HEI), whether public or private, after compliance with the pertinent CHED and STCW requirements as stipulated under this PSG and after the proper authority, pursuant to Sections 54, 56 and 57 of the Manual of Regulations for Private Higher Education of 2008 (MORPHE) has been granted by the CHED.

## **ARTICLE III PROGRAM SPECIFICATIONS**

### **Section 3. Program Title and Degree Name**

The program title of the approved education and training for Marine Deck Officers at the operational level shall be **Bachelor of Science in Marine Transportation (BSMT)**. Consequently, a student who completed such approved education and training and who has complied with all the requirements for graduation thereof shall be conferred with the degree of **Bachelor of Science in Marine Transportation (BSMT)**.

### **Section 4. Program Description**

**Bachelor of Science in Marine Transportation** is a higher education degree program that deals with the study of navigation, cargo handling and stowage, controlling the safe operation and care for persons onboard the ship at the operational level.

#### **4.1 Program Educational Objectives**



The BSMT program aims to:

- a) Provide and equip students with knowledge, understanding, proficiencies, skills, competencies, attitudes and values to qualify them for:

- professional licensure examination; and,
- assessment and certification as officer in charge of a navigational watch on seagoing ships of 500 gross tonnage or more;

- b) Produce graduates that are:

- competent to carry out safely the tasks, duties and responsibilities of an officer in charge of a navigational watch on seagoing ships of 500 gross tonnage or more, both at sea and in port;
- fully conversant with the basic principles to be observed in keeping a navigational watch as per STCW Regulation VIII/2, Chapter VIII of the STCW Code; and,
- qualified to pursue a professional career or advanced studies in any maritime field of specialization.

#### **4.2 Program outcomes**

The graduates of the BSMT program shall have acquired the knowledge and competencies necessary to perform the following:

- a) Demonstrate the ability to perform, at the operational level, the tasks, duties and responsibilities listed in Column 1 of Table A-II/1 under Section A-II/1 of the STCW Code ;
- b) Carry out watchkeeping duties in accordance with Section A-VIII/2, Part 4-1 of the STCW Code;
- c) Apply knowledge in mathematics, science and technology in solving problems related to the profession;
- d) Work in a multi-cultural and/or multi-disciplinary team;
- e) Identify, formulate solutions and solve problems in the work place;
- f) Understand professional and ethical responsibilities;
- g) Communicate effectively, oral or written, in the English language;
- h) Determine the impact and implication of various contemporary issues in the global and social context of the profession;
- i) Engage in lifelong learning and to keep current on the developments in the field of specialization and/or profession;



- j) Use appropriate techniques, skills and modern tools in the practice of the profession in order to remain globally competitive; and
- k) Design and conduct exercises to test hypotheses and verify assumptions, as well as to organize, analyze and interpret data, and draw valid conclusions.

#### **4.3 Specific Professions/Careers/Occupations or Trades**

A graduate of BSMT program is prepared for careers in:

- a) Merchant Marine profession
- b) Maritime Industry
  - 1. Ship operations
  - 2. Ship management
  - 3. Port operations
- c) Maritime Education and Training
- d) Philippine Navy
- e) Philippine Coast Guard

#### **4.4 Allied Programs**

The following shall be considered as allied to the BSMT program for purposes of determining the qualifications of administrators and faculty:

- a) Marine Engineering
- b) Mechanical Engineering (Math & Physics courses)
- c) Electrical Engineering (Math & Physics courses)
- d) Chemical Engineering (Chemistry course)
- e) Naval Architecture and Marine Engineering
- f) Law
- g) Meteorology
- h) Medicine and Nursing (Emergency First Aid and Medical First Aid)

### **ARTICLE IV COMPETENCY STANDARDS, ASSESSMENT AND CERTIFICATION**

#### **Section 5. Competency Standards**

Every student who has satisfactorily completed the BSMT shall have acquired the standard of competence specified under Section A-II/1; Section A-VI/1, paragraph 2; Section A-VI/2, paragraphs 1 to 4; Section A-VI/3, paragraphs 1 to 4; Section A-VI/4, paragraphs 1 to 3 of the STCW Code.

#### **Section 6. Assessment of Competence and Certification**

The assessment of competence of students who have satisfactorily completed the BSMT program and the relevant safety courses as part of the curriculum shall be



in accordance with the methods of demonstrating competence as provided for under Section A-II/1; Section A-VI/1, paragraph 2; Section A-VI/2, paragraphs 1 to 4; Section A-VI/3, paragraphs 1 to 4; Section A-VI/4, paragraphs 1 to 3 of the STCW Code and the pertinent rules and regulations promulgated by the Philippines' STCW Administration. The corresponding Certificate shall be issued by the STCW Administration to students who passed the assessment.

## **ARTICLE V CURRICULUM**

### **Section 7. Curriculum Description**

The BSMT program has a minimum total of 172 credit units. The program is comprised of the general education component following the CHED general education curriculum – B (GEC B) under CMO No. 4, series of 1997, special professional courses, shipboard training (On-Board Training) and Physical Education (PE) and the National Service Training Program (NSTP). This set of courses prepares the students as marine deck officers.

The sequencing of the courses according to pre-requisites and co-requisites must be observed. The shipboard training per CMO No. 2 series of 2012 is in line with the requirements of the 1978 STCW Convention as amended, in which the students/cadets shall be engaged in the actual operation of the ship and the performance of their tasks. A total of 40 units shall be credited to students who satisfactorily fulfilled the requirements of the shipboard training.

The General Education courses shall be revised once a new General Education curriculum is issued by CHED. An amendment to this CMO shall be issued by CHED at such time to show the revised curriculum.

The instructional approach for this program shall be outcomes-based to prepare the students to a life at sea and effectively carry out the tasks, duties and responsibilities of an Officer-In-Charge of a Navigational Watch.

### **Section 8. Curriculum Outline**

**8.1** The one hundred seventy two (172) minimum units comprising the Marine Transportation program curriculum shall be distributed as follows:

<b>Courses</b>	<b>No. of Courses</b>	<b>Equivalent Units per Courses (Lec-Lab)</b>	<b>Total Units</b>
<b>GENERAL EDUCATION COURSES</b>	17	3	51
<b>Language and Humanities</b>	6	3	18
English 1 – Study and Thinking Skills in English		3 (3-0)	



<b>Courses</b>	<b>No. of Courses</b>	<b>Equivalent Units per Courses (Lec-Lab)</b>	<b>Total Units</b>
English 2 –Writing in the Discipline		3 (3-0)	
English 3 – Speech Communication with IMO Standard Marine Communication Phrases		3 (3-0)	
English 4 – Research and Thesis Writing		3 (3-0)	
Humanities 1 – World Culture and Geography		3 (3-0)	
Humanities 2 - Ethics		3 (3-0)	
<b>Mathematics and Natural Sciences</b>	<b>6</b>	<b>3</b>	<b>18</b>
Math 1 – College Algebra		3 (3-0)	
Math 2 – Plane and Spherical Trigonometry		3 (3-0)	
Math 3 – Solid Mensuration		3 (3-0)	
Nat. Sci. 1 – General Physics		3 (2-3)	
Nat. Sci. 2 – Applied Physics		3 (2-3)	
Nat. Sci. 3 – General Chemistry		3 (2-3)	
<b>Information Technology</b>	<b>1</b>	<b>3</b>	<b>3</b>
Computer Applications and Networking		3(2-3)	
<b>Social Sciences</b>	<b>3</b>	<b>3</b>	<b>9</b>
General Psychology with Alcohol and Drug Prevention		3 (3-0)	
Politics and Governance with Philippine Constitution		3 (3-0)	
Society and Culture with Family Planning, STD, HIV & AIDS Prevention		3 (3-0)	
<b>Mandated Courses</b>	<b>1</b>	<b>3</b>	<b>3</b>
The Life, Works and Writings of Jose Rizal		3 (3-0)	
<b>SPECIAL PROFESSIONAL COURSES</b>	<b>21</b>		<b>67</b>
Safety 1 (Basic Training)		2 (1-3)	
Safety 2 (Advanced Training in Fire Fighting, Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats, Medical First Aid)		2 (1-3)	
Safety 3 – Emergency Procedures, Search and Rescue (IAMSAR)		2 (1-3)	
Personnel Management and Training		3 (3-0)	
Maritime Law		3 (3-0)	
Protection of the Marine Environment		3 (3-0)	
Seamanship 1 – Ship, Ship Routines And Ship Construction		3 (2-3)	
Seamanship 2 - Cargo Handling And Stowage		3 (3-0)	



<b>Courses</b>	<b>No. of Courses</b>	<b>Equivalent Units per Courses (Lec-Lab)</b>	<b>Total Units</b>
1, Carriage Of Non-Dangerous Goods			
Seamanship 3 – Cargo Handling And Stowage 2, Carriage Of Dangerous Goods		3 (3-0)	
Seamanship 4 – Stability And Trim		4 (3-3)	
Seamanship 5 – Ship Handling and Maneuvering with Bridge Resource Management using simulator		4 (2-6)	
Navigation 1 – Terrestrial and Coastal Navigation 1		4 (3-3)	
Navigation 2 – Terrestrial and Coastal Navigation 2		4 (3-3)	
Navigation 3 – Celestial Navigation		4 (3-3)	
Navigation 4 – Electronic Navigation		5 (3-6)	
Navigation 5 – Electronic Chart Display and Information Systems		2 (1-3)	
Navigation 6 – Meteorology and Oceanography		4 (3-3)	
D-Watch 1 – Deck Watchkeeping		2 (1-3)	
D-Watch 2 – Collision Regulations		3 (2-3)	
MARCOM – Visual Signalling		2 (1-3)	
MarEng – Basic Marine Engineering		3 (3-0)	
Security Awareness		2 (2-0)	
<b>SHIPBOARD TRAINING</b>			<b>40</b>
<b>PHYSICAL EDUCATION COURSES</b>	<b>4</b>	<b>2</b>	<b>8</b>
P. E. 1 – Basic Swimming			
P. E. 2 – Advanced Swimming			
P. E. 3 – Team Sports			
P. E. 4 – Dual Sports			
<b>NATIONAL SERVICE TRAINING PROGRAM (NSTP)</b>	<b>2</b>	<b>3</b>	<b>6</b>
<b>SUMMARY OF UNITS</b>			
General Education Courses			<b>51</b>
Special Professional Courses			<b>67</b>
Shipboard Training			<b>40</b>
P.E			<b>8</b>
NSTP			<b>6</b>
<b>TOTAL NO. OF UNITS</b>			<b>172</b>



## 8.2 Pre-requisites and Co-requisites

Courses	Pre-requisites
Safety 1	
Safety 2	Safety 1
Safety 3	
Personnel Management and Training	
Maritime Law	
Protection of the Marine Environment	
Seamanship 1	
Seamanship 2	Seam 1
Seamanship 3	Seam 2
Seamanship 4	Seam 3
Seamanship 5	Seam 4
Navigation 1	
Navigation 2	Nav 1
Navigation 3	Nav 2
Navigation 4	Nav 3
Navigation 5	Nav 4
Navigation 6 - Meteorology and Oceanography	
D-Watch 1	
D-Watch 2	D-watch 1
MARCOM - Visual Sgnalling	
MarEng - Basic Marine Engineering	





<b>Courses</b>	<b>Pre-requisites</b>
Security Awareness	
English 1	
English 2	English 1
English 3	English 2
Nat. Sci. 1	
Nat. Sci. 2	Nat. Sci. 1
P.E. 1	
P.E. 2	P.E. 1
P.E. 3	
P.E. 4	

### **Section 9. Safety Courses**

All Maritime Higher Education Institutions shall comply with the minimum standards provided for under CHED Memorandum Order No. 20, series of 2010 governing the basic safety training course. The advance safety training course as required under the STCW 78 convention, as amended shall also be complied with.

### **Section 10. Simulator Courses**

Courses such as, Radar Navigation, Radar Plotting and use of ARPA, Electronic Chart Display and Information System (ECDIS) and Safety Courses, shall be an integral part of the curriculum based on the training requirements under the relevant provisions of the STCW Convention as amended. These shall be reflected in the transcript of records (TOR).

### **Section 11. Shipboard Training**

All Maritime Higher Education Institutions (MHEIs) shall comply with the minimum standards provided for under CMO No. 2, series of 2012 entitled *"Implementing Guidelines on the Shipboard Training Requirement for the Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) Programs"*.

### **Section 12. Program of Study**

In light of the paradigm shift towards student-centered education, the program of study is expected to show its learning outcomes. The graduate of BSMT is expected to possess a wide range of abilities and skills divided into three broad categories:



- a) Deck-related cognitive abilities and skills, e.g., abilities and skills relating to intellectual tasks, including analysis of problems and systematic problem-solving;
- b) Deck-related practical skills, e.g., skills relating to the conduct of laboratory work, proper use of equipment and the like ; and
- c) Generic skills that may be developed during the program and which are applicable in many other contexts, such as maritime communication and discourse in view of issues and policy.

The BSMT program of study is provided in **Annex "A"** of this CMO. MHEIs offering the BSMT program shall revise and update the said program of study depending on the needs of the industry, current trends and practices, effect of promulgation and implementation of new laws, rules and regulations locally and internationally (e.g. amendments to the STCW Convention) and such other factors or considerations as may be applicable. Provided, that all prescribed courses/competencies as required herein are offered and complied with and pre-requisites and co-requisites are observed. Provided further that the revised and updated curriculum shall be approved by CHED.

### Section 13. Summary Matrix of STCW Functions vis-à-vis Courses

STCW FUNCTION N	1 <sup>ST</sup> YEAR		2 <sup>ND</sup> YEAR		3 <sup>RD</sup> YEAR	
	1 <sup>ST</sup> SEM	2 <sup>ND</sup> SEM	1 <sup>ST</sup> SEM	2 <sup>ND</sup> SEM	1 <sup>ST</sup> SEM	2 <sup>ND</sup> SEM
FUNCTION 1	NAV 1	NAV 2	NAV 3	NAV 4	NAV 5	SEAM 5
		D-WATCH 1	D-WATCH 2		MarEng	NAV 6
				MAR COM		
FUNCTION 2	SEAM 1	SEAM 2	SEAM 3	SEAM 4		
FUNCTION 3	SEAM 1		SAFETY 1	SEAM 4	SAFETY 3	PERS MAN
						MAR LAW
				SAFETY 2	Mar.Env.	

### Section 14. Review, Revision and Approval of Curriculum

Every maritime HEI offering the BSMT program shall, for purposes of updating and enriching their program offerings, conduct monitoring of the curriculum and the corresponding course syllabi comprising such programs at least once in a year and program review every five years. For this purpose, MHEIs shall incorporate in its Quality Management Manual the procedures to undertake such review, guided by the following:



### **a) Review and Revision**

1. Any review and revision of curriculum and course syllabi shall be aimed towards continuing improvement of the BSMT program.
2. Such review and revision shall consider the needs of the industry, current trends and practices, effect of promulgation and implementation of new laws, rules and regulations locally and internationally (e.g. amendments to the STCW Convention) and such other factors or considerations as may be applicable.
3. Any review and revision made on the curriculum and course syllabi must be clearly and properly identified and presented for purposes of evaluation and approval.
4. The proposed revised program curriculum/ course syllabi shall be subject to the approval of CHED.

### **b) Submission of the Proposed revised Program Curriculum/ Course Syllabi**

1. Any proposed revision to the program curriculum and/or course syllabi shall be submitted to CHED for approval.
2. The application shall be duly supported with documentary evidence that the proposed revised program curriculum/ course syllabi is responsive to and in accordance with the needs of the industry, current trends, practices, new laws, rules and regulations, among others.
3. The application shall then be forwarded by the CHEDRO to the MEU-OPS of the CHED Central Office upon receipt thereof.

### **c) Evaluation of the Proposed revised Program Curriculum/ Course Syllabi**

1. The MEU-OPS evaluates the application for approval of the proposed revised program curriculum/ course syllabi together with the supporting documents thereof to determine whether the revision observes pre-requisites, relevance, responsiveness and appropriateness of the revisions made;
2. The duly evaluated proposed revised program curriculum/ course syllabi shall then be referred to the CHED's Technical Panel for Maritime Education (TPME) for final review. The TPME shall recommend approval or disapproval or ocular inspection depending on the revisions made relative to the technical requirement for laboratory equipment as specified under the 1978 STCW convention as amended.



**d) Approval of the Proposed revised Program Curriculum/ Course Syllabi**

1. If the TPME finds the proposed revised program curriculum/ course syllabi in order and meritorious, the same shall be recommended for approval by the OPS Director.
2. Upon receipt of the TPME recommendation, the OPS Director shall then approve the proposed revised program curriculum/ course syllabi and endorse the same to the Executive Director.
3. The Executive Director approves the proposed revised program curriculum/ course syllabi and informs the MHEI through the CHEDRO of the approval thereof.

**e) Disapproval of the Proposed revised Program Curriculum/ Course Syllabi**

1. If the TPME finds the proposed revised program curriculum/ course syllabi untenable and without merit, the same shall be recommended for disapproval by the OPS Director.
2. Upon receipt of the TPME recommendation, the OPS Director shall then disapprove the proposed revised program curriculum/ course syllabi and endorse the same to the Executive Director.
3. The Executive Director disapproves the proposed revised program curriculum/ course syllabi and informs the MHEI through the CHEDRO of the disapproval thereof.

**f) Effectivity and Implementation of the revised Program Curriculum/ Course Syllabi**

1. A duly approved revised program curriculum/ course syllabi shall take effect and be implemented in the first semester of an academic year.
2. Such revised program curriculum/ course syllabi shall only cover incoming freshmen students.

**ARTICLE VI  
COURSE SPECIFICATIONS**

**Section 15.** The course specifications for the BSMT program are contained in **Annex "B"** of this CMO.



**ARTICLE VII  
PROGRAM ADMINISTRATION**

**Section 16. Organization**

A distinct and separate College of Maritime Education shall be established for the operation of maritime programs. There shall be established under the College of Maritime Education a department for every maritime program.

The College of Maritime Education shall be managed by a Dean. However, if only one program is offered, the Dean may serve as concurrent department chair where appropriate.

**Section 17. Dean**

The dean shall have the following qualifications:

**A. for holder of management level certificate:**

- 1) Holder of a Bachelor's degree –BSMT or Bachelor of Science in Marine Engineering (BSMarE);
- 2) Holder of not less than 24 months of sea-going service as Chief Mate (C/M) or Second Engineer Officer (2/E);
- 3) Holder of a valid Professional Regulation Commission (PRC) License as Management Level Officer
- 4) Holder of not less than three (3) years of teaching experience and two (2) years of managerial experience; and
- 5) Completed the following training courses:
  - ✓ IMO Model Course 6.09 (Training Course for Instructors)
  - ✓ IMO Model Course 3.12 (Assessment, Examination and Certification of Seafarers)

**B. For holder of Officer in Charge of a Navigational Watch (OIC-NW)/  
Officer in Charge of a Engineering Watch (OIC-EW) certificate:**

- 1) Holder of a BSMT or BSMarE degree;
- 2) Holder of Master's degree;
- 3) Holder of a valid PRC license as OIC-NW or OIC-EW and have not less than 36 months of sea-going experience in such capacity;



- 4) Holder of not less than five (5) years of teaching experience and three (3) years of managerial experience; and
- 5) Completed the following training courses:
  - ✓ IMO Model Course 6.09 (Training Course for Instructors)
  - ✓ IMO Model Course 3.12 (Assessment, Examination and Certification of Seafarers)

The Dean shall be allowed to handle a maximum teaching load of not more than 12 hours a week.

### **Section 18. Department Chair/Head**

The Marine Transportation Department under the College of Maritime Education shall be administered by a Department Chair/Head who shall have the following qualifications:

- a) Holder of a BSMT degree;
- b) Holder of a management level certificate with not less than 12 months sea-going experience as C/M;
- c) Holder of a valid PRC license;
- d) Holder of not less than three (3) years of teaching experience; and
- e) Completed the following training courses:
  - ✓ IMO Model Course 6.09 (Training Course for Instructors)
  - ✓ IMO Model Course 3.12 (Assessment, Examination and Certification of Seafarers)

The Department Chair/Head shall be allowed a maximum teaching load of 18 hours a week.

### **Section 19. Faculty**

**19.1** Faculty members teaching **General Education Courses** shall be holders of appropriate master's degree in his/her field of specialization. However, in specific fields where there is dearth of holders of Master's degree, a holder of professional license requiring at least a bachelor's degree may be qualified to teach.

Faculty members teaching physical education courses shall be holders of a bachelor's degree in physical education or Bachelor of Science in education with major or minor in physical education, or any other bachelor's degree with certificate in physical education.



**19.2** Faculty members teaching **Special Professional Courses** shall be holders of relevant academic degree, valid certificate of registration and professional license, experiences and credentials as follows:

- a) BSMT degree;
- b) Holder of a valid certificate of registration and PRC license as OIC-NW;
- c) Holder of not less than 12 months of sea-going experience as an OIC-NW on seagoing ship on vessel over 500 GT; and
- d) Certificate of completion of the "Training Course for Instructors" (IMO Model Course 6.09).

The faculty may be allowed a maximum teaching load of 40 hours per week.

**Special Professional Courses** are courses which are mandated by professional licensing bodies/entities in the case of academic programs with government licensure examination.

**19.3** Faculty members teaching **courses which fall under the category of allied fields** as enumerated under Section 4.4 of this CMO shall be holders of the following:

- a) Appropriate Bachelor's degree in such allied fields;
- b) Valid certificate of registration and PRC license of his/her profession; and
- c) Certificate of completion of the "Training Course for Instructors" (IMO Model Course 6.09)

The faculty may be allowed a maximum teaching load of 40 hours per week.

**19.4** Faculty members **teaching courses involving the use of simulators**, in addition to the requirements in the preceding paragraph shall:

- a) Be holder of a Certificate of Completion of the "Train the Simulator Trainer and Assessor Course" (IMO Model Course 6.10), or an approved training course for Simulator Instructors and Assessors by the Philippines' STCW Administration;
- b) Have acquired appropriate guidance in instructional techniques involving the use of simulators; and
- c) Have gained practical operational experiences on the particular type of simulators being used.



**Note: transfer of technology training conducted by the supplier of simulator being used satisfies the above requirement.**

**19.5** A faculty member with a very satisfactory teaching performance may be allowed to handle additional six (6) hours per week.

**19.6** There shall be faculty manual containing information and policies on:

- a. Hiring, retention, promotion and separation;
- b. Functions and responsibilities;
- c. Ranking system;
- d. Evaluation;
- e. Salary rates;
- f. Faculty benefits; and
- g. Code of conduct/ethics.

**19.7 Faculty-Student Ratio** - For effective teaching-learning process the following faculty-student ratio per lecture class is 1:50.

**19.8 Student-Equipment Ratio** – refer to respective course specs.

### **19.9 Faculty Development**

Maritime institution must develop and implement a system of faculty development for professional advancement of the faculty members for the allied/professional subjects.

## **Section 20. Assessors**

Persons conducting assessment of competence of a cadet within the institution shall:

- a) have an appropriate level of knowledge and understanding of the competence to be assessed
- b) be qualified in the task for which the assessment is being made
- c) have undergone training in:
  - ✓ "Training Course for Instructors" (IMO Model Course 6.09)
  - ✓ "Assessment, Examination and Certification of Seafarers" (IMO Model Course 3.12); and
  - ✓ "Train the Simulator Trainer and Assessor Course" (IMO Model Course 6.10), or an approved training course for Simulator Instructors and Assessors by the Philippines' STCW Administration for those assessing competence using simulators;





- d) gained practical assessment experience on the particular type of simulator under the supervision and to the satisfaction of an experienced assessor

## **Section 21. Technical Support Personnel**

Technical Support Personnel particularly those in the laboratory must have the appropriate training or certification on laboratory supervision and safety. Laboratory safety is the responsibility of the institution. As such, the institution shall be responsible for keeping its laboratories properly used and maintained and free from dangers and hazards which may cause accidents or disease. The following must be observed:

- a) All laboratory activities shall be properly and adequately supervised by a faculty member; students shall not be allowed to work inside the laboratories unsupervised; and
- b) Each department with laboratory/ies shall have full-time laboratory technician/s to maintain laboratory facilities;

## **Section 22. Library**

The library under the College of Maritime Education shall be administered by a professional librarian with two (2) library assistants. The librarian must possess a valid professional regulation commission ID.

### **22.1 Library Holdings**

- a) Basic Collection
  - 1) 3,000 volumes for start-up schools (50% of the holdings should be distinct titles)
  - 2) 5,000 volumes after two-years of operation (50% of the holdings should be distinct titles)
- b) Inclusion of Basic Collection
  - 1) General References
  - 2) Cultural
  - 3) Filipiniana
  - 4) Humanities
  - 5) Social Science
  - 6) Science and Technology
  - 7) General Education courses should have not less than five (5) titles per course.



c) Professional Book Holdings

- 1) Five (5) titles per professional course. Instructors' Manuals are not counted as titles
- 2) Published within the last 5 years or publications that remain their validity
- 3) The number of volumes is calculated at a ratio of 1 volume per 15 students enrolled in the course
- 4) Maritime international laws, conventions, protocols and relevant publications.

d) Periodical Collection

- 1) Newspapers
- 2) On-line subscriptions to Journals may be credited (1 international and 2 local)
- 3) Magazines
- 4) Bulletins
- 5) Reviews

## **22.2 Library Space**

The library space should accommodate at least five percent (5%) of the total enrollment at any given time.

## **22.3 Networking**

Libraries shall participate in inter-institutional activities and cooperative programs whereby resource sharing is encouraged.

# **ARTICLE VIII FACILITIES AND EQUIPMENT**

## **Section 23. Institutional Sites and Buildings**

An MHEI shall own its institutional sites and buildings to conform with CHED standards, building code and city/provincial ordinances. The institutional sites and buildings shall be equipped with adequate equipment, safety measures and procedures in the following:

- a) Fire escape
- b) Fire alarm systems
- c) Campus security force

Site/Building/Room Requirements shall include the following:

- a) Institutional site/lot



- b) Athletic field and/or gymnasium
- c) Administrative Offices (General or Executive Office, Registrar, Accounting, National Service Training Program (NSTP), Guidance/Placement office)
- d) Medical and dental clinic
- e) Toilets
- f) Canteen/cafeteria
- g) Faculty room
- h) Student lounge
- i) Library room
- j) Laboratory room
- k) Tool room
- l) Shipboard Training Office
- m) Research and Extension Office
- n) Assessment Room

#### **Section 24. Classroom**

The standard classroom shall be a minimum of 30 square meters for a class of 25 students and 56 square meters for a class of 50 students. Classrooms must be well-lighted and well-ventilated. They should contain the necessary equipment and furniture such as chairs, instructor's podium, and black/white boards.

#### **Section 25. Laboratory**

The laboratory rooms should allow a space of 2 square meters per student for a laboratory size of 25 students or an appropriate space considering the size of equipment as per course specifications. They should be well-ventilated and well-lighted, contain the specific laboratory equipment and must be provided with adequate water supply. The following laboratory rooms shall be made available as follows:

- a) Physics laboratory room
- b) Chemistry laboratory room
- c) Computer laboratory room
- d) Basic and Advanced safety training course laboratory room
- e) Chart work area
- f) Full mission bridge simulator room
- g) Seamanship room

##### **25.1 Laboratory Equipment**

All laboratory equipment shall be owned by the institution and located within the institutional site. There shall be sufficient number of equipment, machinery, apparatus, supplies, tools and other materials, accessories and consumables for laboratory experiments and practical exercises as contained in **Annex "C"** which are made an integral part of these policies, standards and guidelines. The laboratory training equipment as contained in **Annex "C"** shall be adapted in the following:



- a) Physical Sciences
- b) Basic and Advanced Safety Courses
- c) Special Professional Subjects Laboratory Requirement

Sufficient and appropriate means that the number of such teaching aids and equipment shall be proportionate and adequate to the number of students enrolled in the particular subject.

Standards governing the use of simulators shall be contained in **Annex "D"**.

The institution shall provide the necessary audiovisual room and facilities with appropriate equipment in support of the teaching-learning process such as video/overhead/slide projector, sound system, LCD projectors, screens, and others.

## **ARTICLE IX RESEARCH AND EXTENSION**

### **Section 26. Organization**

There shall be established under the College of Maritime Education a research and extension office which shall be administered by a coordinator. The research and extension office shall be responsible for the administration and coordination of research and extension services.

### **Section 27. Research**

Every MHEI shall encourage and support its faculty members and students to undertake research for the enhancement of maritime education programs and training. The following must be observed:

- a) Annual research budget
- b) Annual research agenda
- c) Proper documentation and maintenance of research output
- d) Research output must be visible in the library

### **Section 28. Extension**

Every MHEI shall have extension services relevant to the maritime industry. The following must be observed:

- a) Annual extension services program
- b) Annual extension services budget
- c) Tracer study program
- d) Proper documentation of all extension activities must be maintained



## **ARTICLE X QUALITY STANDARDS SYSTEM**

Every MHEI shall have a certified quality standards system in accordance with the provisions of the "Rules for a Quality Standards System in Maritime Higher Education Institutions" as contained in **Annex "E"** of this CMO.

New MHEIs applying for the operation of maritime program/s must have its QSS documentation for certification by a CHED authorized certifying body prior to issuance of government authority (first year permit). Subsequently, QSS certification must be secured before applying for the 2<sup>nd</sup> year level.

The QSS of MHEIs shall be evaluated by the CHED authorized certifying body at least once a year.

Considering that CHED has already delegated to the maritime institutions the authority to approve in its behalf the shipboard training of shipping companies where their cadets will be placed, the procedures for such approval shall be included in the QSS of the institution as well as all other policies and procedures as required under CMO No. 2, series of 2012.

The qualifications of internal auditor of the maritime institutions shall be specified in its QSS, and shall comply with requirements under Section A-I/8 of the STCW '78 as amended.

## **ARTICLE XI ADMISSION AND RETENTION**

Maritime institutions shall adhere to the following admission and retention criteria:

a) Student general admission requirements:

- 1) High School graduate
- 2) Medical examination following the prescribed Department of Health (DOH) medical requirements such as but not limited to: Urine, Stool, CBC, X-Ray, Psycho, Eyesight (Ishihara) and hearing examination.

b) Student general retention requirements:

- 1) Assessment of students after the first year level to ensure achievement of the program objectives; and
- 2) Annual medical examination following the prescribed Department of Health (DOH) medical requirements such as but not limited to: Urine,



Stool, CBC, X-Ray, Psycho, Eyesight (Ishihara) and hearing examination.

## **Article XII MISCELLANEOUS PROVISIONS**

### **Section 29. Sanctions**

For violation of the foregoing policies, standards and guidelines, CHED shall impose sanctions, as it may deem appropriate pursuant to Republic Act No. 7722 [Higher Education Act of 1994], Batas Pambansa Bilang 232 [The Education Act of 1982], CMO No. 40, s. 2008 [Manual of Regulations for Private Higher Education of 2008 (MORPHE)] and all other applicable CHED rules and regulations and legislations, such as but not limited to outright closure or phasing-out of the BSMT program pursuant to Section 61 of the MORPHE.

A BSMT program which is ordered closed shall mean that its government authority is revoked. Whereas, a BSMT program which is ordered phased-out shall mean that its government recognition is reverted to permit status. In both cases, the institution is prohibited from accepting enrollees at all levels.

However, phased-out programs shall be allowed to continue its operation so that affected students that are already in the second, third and fourth year levels shall have the opportunity to finish their studies until graduation. In no case shall affected students be prohibited from transferring to other MHEIs of their preference.

Students who completed their academic requirements on or before the issuance of closure or phase-out order shall be conferred the appropriate Bachelor's Degree upon completion of all other requirements for graduation including shipboard training.

The smooth transfer of students shall be effectively carried out by CHED Regional Office and the MHEI concerned. In the meantime, the MHEI has the option to convert said program/s to the Technical Vocational discipline.

### **Section 30. Repealing Clause**

All issuances, relevant to policies, standards and guidelines which are inconsistent with the provision of this CMO are hereby repealed, amended, modified or superseded accordingly in accordance with the intent of this Order.

### **Section 31. Separability Clause**

If any part or provision of this CMO shall be held unconstitutional or invalid, other provisions hereof which are not affected thereby shall continue to be in full force and effect.

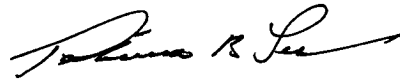


### **Section 32. Effectivity Clause**

This CMO shall take effect immediately upon approval by the Commission and 15 days after its publication in the Official Gazette or in newspaper of general circulation. This CMO shall be implemented beginning School Year (SY) 2013-2014.

Quezon City, Philippines, 14 May 2013.

For the Commission:



**PATRICIA B. LICUANAN, Ph.D.**  
Chairperson

