



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

**CHED MEMORANDUM ORDER (CMO)**

No.: 38

Series of 2005

SUBJECT: **IMPLEMENTING RULES AND REGULATIONS FOR THE IMPLEMENTATION OF THE BRIDGING PROGRAM FOR THE BS MECHANICAL ENGINEERING (BSME) AND THE BS ELECTRICAL ENGINEERING (BSEE) TO BS MARINE ENGINEERING (BSMarE) PROGRAM**

In accordance with the pertinent provisions of Republic Act (RA) No. 7722 otherwise known as the "Higher Education Act of 1994," and by virtue of Resolution No. 640-2005 of the Commission en banc dated November 7, 2005, during its 261<sup>st</sup> CEB meeting, the following guidelines for the implementation of the bridging program of the BS Mechanical Engineering (BSME), and the BS Electrical Engineering (BSEE) to the Bachelor of Science in Marine Engineering (BSMarE) program are hereby adopted and promulgated by the Commission.

**INTRODUCTION**

Rationale and Background. This Bridging Program for the BS Mechanical Engineering and BS Electrical Engineering to BS Marine Engineering program started when Maritime Industry Authority (MARINA) reported to Department of Transportation and Communication (DOTC) that there was a lack of qualified marine officers and recommended that there should be a Special Program to qualify mechanical engineers for the Licensure Examination as Marine Engineer Officers. This idea was recommended to CHED for consideration. Hence, the Commission reviewed the existing curricula of BSME and BSEE and compared these to the BSMarE curriculum. The Technical Working Group in Engine together with the qualified technical experts from the academe, industry, professional organizations, government concerned agencies including Professional Regulation Commission (PRC) and other stakeholders undertook the development and revision, making sure that the national standards and STCW requirements are incorporated. It has also undergone further review by the members of the Technical Panel for Maritime Education (TPME), Task Force on Mechanical Engineering and Electrical Engineering of CHED, before it was recommended to the Commission through the Office of Programs and Standards for issuance to the maritime institutions for implementation.

## AUTHORIZATION

The abovementioned bridging program shall be operated only by institutions of higher learning with proper authority granted by the Commission on Higher Education (CHED) or by the respective Boards in case of chartered State Universities and Colleges (SUCs). Said institutions shall apply to the CHED Central Office through the CHED Regional Offices (CHEDROs) concerned with full documentation on the requirements of this CMO. Application fee is not required.

## COMPETENCY STANDARDS

As prescribed under the provisions of the Standards of Training, Certification and Watchkeeping (STCW) 1978, as amended and in compliance with the CHED Memorandum Order (CMO) Number 13, series of 2005 – Policies, Standards and Guidelines (PSG) for Maritime Education (2005 Revision), standard of competence for the BS Marine Engineering (BSMarE) program shall be followed.

## CURRICULUM

The herein curriculum outline shall be adopted as the minimum requirement for the completion of the said bridging program of BSME and BSEE to BS Marine Engineering (BSMarE) program.

## CURRICULUM FOR THE BRIDGING PROGRAM OF BSME TO BSMARE PROGRAM

Courses	Units
SEAM 1 (Ships & Ship Routines)	3
Safety (Basic Safety)	2
E Watch 1 (Watchkeeping, Eng. Officers)	1
NAVAL ARCH (Introduction to Naval Architecture)	2
MARPOL (Martine Pollution & Prevention)	3
MARLAW (Maritime Laws)	3
<b>Sub Total</b>	<b>14</b>
Shipboard Training	40 (6 months supervised)
<b>Grand Total</b>	<b>54</b>

*Note: The course specifications of the above listed courses shall conform with the provisions of the Course Specifications as provided for in the CHED Memorandum Order (CMO) Number 13, series of 2005 - Policies, Standards and Guidelines (PSG) for Maritime Education (2005 Revision).*

**CURRICULUM FOR THE BRIDGING PROGRAM OF BSEE TO BSMARE PROGRAM**

<b>Subjects</b>	<b>Units</b>
SEAM 1 (Ships & Ship Routines)	3
Safety (Basic Safety)	2
E Watch 1 (Watchkeeping, Eng. Officers)	1
NAVAL ARCH (Introduction to Naval Architecture)	2
Power 1 (Marine Power Plant-Diesel)	4
Aux Mach 1 (Auxiliary Machinery 1)	4
MARPOL (Martine Pollution & Prevention)	3
PERSMAN (Shipboard Personnel Management)	3
AUTO 1 (Marine Automation 1)	4
MARLAW (Maritime Laws)	3
Power 2 (Marine Power Plant-Steam)	4
MASHOP 1 (Machine Shop 1)	3
MASHOP 2 (Machine Shop 2)	3
MASHOP 3 (Machine Shop 3)	3
<b>Sub Total</b>	<b>36</b>
Shipboard Training	40 (6 months supervised)
<b>Grand Total</b>	<b>76</b>

*Note: The course specifications of the above listed courses shall conform with the provisions of the Course Specifications as provided for in the CHED Memorandum Order (CMO) Number 13, series of 2005 - Policies, Standards and Guidelines (PSG) for Maritime Education (2005 Revision).*

**SHIPBOARD TRAINING**

Students of the bridging program who have completed the BS Mechanical Engineering or BS Electrical Engineering programs shall undergo the said required seagoing service documented in a CHED-Approved Training Record Book. The supervised seagoing service of at least six months duties in the engine department is under the supervision of the Chief Engineer or a qualified Officer.

### ADMISSION

This program is basically intended for those who have finished the Bachelor of Science in Mechanical Engineering (BSME) or Bachelor of Science in Electrical Engineering (BSEE) even without experience in land or sea-based.

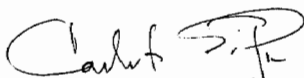
### TUITION FEE

Institutions offering this bridging program shall determine their respective tuition fee schedule.

### EFFECTIVITY

This CMO takes effect SY 2006-2007.

Pasig City, Philippines, November 15, 2005



**CARLITO S. PUNO, DPA**  
Acting Chairman