MARITIME ACADEMY OF ASIA AND THE PACIFIC
KAMAYA POINT
Associated Marine Officers' and Seamen's Union of the Philippines-PTGWO-ITF

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MAAP PROSPECTUS

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Ensuring Excellence At Sea, At All Times...

Invitation from the MAAP President

Welcome to the Maritime Academy of Asia and the Pacific (MAAP) – in Mariveles Bataan Philippines!

I am pleased to introduce MAAP, a leading provider of maritime education and training to both aspiring and current seafarers in the Asia Pacific region and beyond. We take pride in offering formal and non-formal maritime programs which conforms to national and international standards. The curricula has been designed and is anchored in the belief that maritime education and training plays a significant role in the Philippines' position as the manning capital of the world with qualified and competent maritime professionals plying international waters. Our courses offered are relevant, up-to-date and responsive, not only for the ASEAN 2015 integration but for the global society.

Maritime education and training at MAAP promotes holistic, relevant and challenging development of our students for their life's journey. We believe in student-centered learning and in developing thirst for knowledge in our students as continuous professional development is a crucial element in their future maritime career. Our student development system involves leadership training, values formation and character development, and independence of thought, discipline, and sense of responsibility which are also integral part of their success in their profession.

With the state-of-the art facilities, globally competitive quality MET programs, competent instructors and strong management commitment to excellence; your skills, knowledge and full capabilities will surely be developed. We are confident that our programs will provide an outcome-based educational experience that will help our graduates be part of the renown Filipino global maritime professionals sailing in every ship, in every sea, moving the world!

We look forward to welcoming you here in MAAP!

VADM EDUARDO MA R SANTOS, AFP (RET)
MAAP President

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1. MAAP VISION AND MISSION

MAAP Vision - The Maritime Academy of Asia and the Pacific envisions itself as a leading institution of excellence in the maritime education and training in the Asia-Pacific region and beyond.

MAAP Mission - The Maritime Academy of Asia and the Pacific provides **quality education and training** to students for the development of **competent graduates** who shall possess the **character**, **knowledge**, and **skills** necessary for the successful pursuit of a **maritime career**.

2. MAAP QUALITY POLICY

We at MAAP commit to manage a maritime education and training environment that **satisfies its clientele's and stakeholder's requirements** and achieves greater efficiency by **continual system improvement.**

3. MAAP EDUCATIONAL PHILOSOPHY

Education is the development of the total individual all throughout his life's journey. Education through student-centered approach and development of thirst for knowledge; student development system thru leadership training and independence of thought, discipline, and sense of responsibility, and; state-of-the-art equipment and competent teachers ensure confidence and competence aboard ship.

4. MAAP AIMS AND OBJECTIVES

The Academy, as an institution of higher learning, aims to:

- Provide excellent maritime education and training programs and courses;
- Develop and enhance maritime training courses at ASTC;
- Provide and develop competent manpower and enhance their welfare;
- Provide, maintain and enhance the relevant infrastructure, facilities and equipment;
- Strengthen its community relations through extension services;
- Conduct innovative research and development programs;
- Sustain sponsorship and placement/employment of students/graduates;
- Strengthen national and international linkages and partnership;
- Provide and maintain healthy and safe operation environment;
- Provide and sustain financial budget for operation; and
- Provide education and training support for AMOSUP and its members.

5. HIGHLIGHTS OF ACCOMPLISHMENTS

- To date, MAAP has produced 1,337 deck officers, 1,448 marine engineers and 127 dual officers, a total of 2,912 graduates for the world maritime fleet.
- The dual officers are graduates of the 4½-year certified Bachelor of Science in Marine Transportation and Engineering (BSMTE) Program offered from 2009 to 2012 as a response to the European Maritime Industry demands and for preserving the country's enviable position in the global seafaring industry.
- MAAP produced 113 Bridging Program students who have completed their Academic Requirements; 100 of them have also obtained CHED Special Order as graduates of BS Marine Engineering.
- MAAP **ranks no. 1 from top ten maritime universities** (**www.finduniversity.ph/philippine-universities-ranking/maritime**.
- MAAP ranked no. 28 by the Webometrics Ranking of World Universities based on its web, presence, impact and excellence rank HTTP://WWW.LOCALPULSE.NET/EDUCATION/2014-TOP-100-COLLEGES-UNIVERSITIES-PHILIPPINES-967/
- Positive indicators of MAAP success are:
  - ⇒ **MAAP performance in the PRC, now MARINA licensure examinations;**
  - ⇒ 100% employed graduates at their respective sponsoring shipping companies.
  - ⇒ Accreditation by PACUCOA, DNV-GL and PSB-QMET
  - ⇒ signed MOUs/MOAs with local and international agencies
  - ⇒ Affiliation with national and international reputable organizations/ institutions (e.g. PAMI, PAMTCI, GlobalMET, AMFUF, IAMU)
  - ⇒ Leadership of Philippine branches of international organizations - Nautical Institute (NI) and Institute of Marine Engineering, Science and Technology (IMarEST)
  - ⇒ research projects sponsored by external resources both local (National Research Council of the Philippines (NRCP), Commission on Higher Education (CHED), Department of Science and Technology (DOST) and international (European Commission);
  - ⇒ Positive feedback from parents, industry, government and society;
  - ⇒ number of international and national awards granted to students and personnel
  - ⇒ external recognitions received from reputable local and global organizations

4. HISTORY

The MARITIME ACADEMY OF ASIA AND THE PACIFIC (MAAP) was envisioned and established on January 14, 1998 by its Chairman Capt. Gregorio S. Oca, the visionary founder, and President of AMOSUP (Associated Marine Officer's and Seamen's Union of the Philippines) to be at par with the best maritime education and training institutions in the world. MAAP is designed as a world-class maritime academy equipped with state-of-the-art facilities compliant to the requirements of the STCW (Standards of Training, Certification and Watchkeeping for Seafarers).

The academy, accredited by the Commission of Higher Education (CHED), offers four-year scholarship grants in Marine Transportation (BSMT) and Marine Engineering (BS MarE), a 4 ½-course in Marine Transportation and Engineering (BSMTE), Bridging Program for Marine Engineering, and post graduate courses to qualified applicants, selected nationwide through competitive entrance requirements. Through appropriate arrangement with various sponsors and donors, every graduate is assured of employment aboard commercial ships plying the foreign trade.

The AMOSUP Seamen's Training Center (ASTC), on the other hand, which is accredited by Maritime Industry Authority (MARINA), Maritime Training Council (MTC), and the Technical Education and Skills Development Authority (TESDA), was established in 1972, to carry out programs and services to benefit Union's members and their dependents. ASTC conducted its first orientation seminars and training courses in 1973, with emphasis on trade unionism, dignity of the profession, duties and responsibilities to the Union, to the employer, to the country and other subjects on the never ending technological changes affecting working conditions onboard modern vessels.

Owing to the vision of Capt. Oca, the support of Stolt-Nielsen, Norwegian Shipping and Offshore Federation, and other unions and private organizations, the training center continuously improved and upgraded its quality of service and kept on increasing the number of courses being offered.

A Governing Board composed of the Private Sector, Danish Shipowners Association, Norwegian Shipowners Association, Japanese Shipowners

Association (JSA), All Japan Seamen's Union (AJSU), the Norwegian Seafarers Unions (NSU), International Transport Workers Federation (ITF), International Maritime Employees' Council (IMEC), the International Mariners Management Association of Japan (IMMAJ) and the Filipino Association of Marines' Employment (FAME) run the Maritime Academy of Asia and the Pacific.

To date, MAAP sits on a 143-hectare site which covers the IMMAJ-PJMCC Campus equipped with the latest cutting-edge maritime simulators and laboratories in the Philippines inaugurated on April 7, 2009; the Center for Advanced Maritime Studies (CAMS) building inaugurated On November 28, 2011; Capt. Gregorio S. Oca Monument, Campus and Building, and; Engr. Johnny S. Oca Building.

5. GENERAL INFORMATION

Program Offerings:

1. Bachelor of Science in Marine Transportation (BSMT)
2. Bachelor of Science in Marine Engineering (BSMarE)
3. Bridging Program for BS Mechanical Engineering (BSME) and BS Electrical Engineering (BSEE) to Marine Engineering Program (BSMarE)

BSMT and BSMarE Programs**,** originally designed in cooperation with the US Merchant Marine Academy (USMMA), are 4-year courses with sea phase scheduled in the third year. The BSMT and BSMarE curricula require a total of 246 units with 206 academics at MAAP and 40 units equivalent to one-year shipboard training on board MAAP training ship (T/S Kapitan Felix Oca) and/or sponsoring company ships. All MAAP graduates are required to take the MARINA licensure examinations, after our in-house review and validation tests.

Bridging Program for Mechanical and Electrical Engineers to Marine Engineers was developed to partly address the global shortage of marine engineers. In 2005, CHED, PRC and DOLE signed a MOA to implement this program for mechanical and electrical engineers to be marine engineers. Bridging program for mechanical and electrical engineers includes marine engineering, safety, maritime law and other specialized subjects and a six-month shipboard training. In 2006, MAAP started offering Bridging Program for Mechanical and Electrical Engineers as approved by PRC and partly subsidized by OWWA.

Scholarship

MAAP cadets enjoy the following benefits as scholars:

- Free tuition
- Free board and lodging
- Insured while enrolled in the Academy
- In-house shipboard training
- Personality, character, and leadership development through physical fitness, emotional literacy, NROTC and varied extra curricular activities
- Use of modern equipment and facilities
- Employment onboard modern vessels of foreign shipping companies after graduation

Qualification Requirements

- Male or female, Single, Filipino Citizen, Physically fit
- Morally upright and has no derogatory record
- Aged 17 and not more than 23 years old on March 31 of the academic year of admission
- Eligible applicants:
  - ⇒ High school graduate
  - ⇒ College level
  - ⇒ Alternative Learning System (ALS) Program Passer, certified eligible for admission to college/tertiary level
  - ⇒ Senior high school student who is expected to graduate at the end of the school year
- Must be a high school graduate with at least a GPA of 83%
- Minimum height of 5 ft. 4 in. (162.5 cm) for MALE and 5 ft. 2 in. (157.5 cm) for FEMALE applicants
- Has never been officially admitted at MAAP**.**

Application Requirements

- 2 copies 2 x 2 colored pictures
- Photocopy of birth certificate
- Photocopy of High School Diploma/Certificate of Graduation
- Photocopy of valid school ID
- Photocopy of High School Report Card with at least a GPA of 83%
- Payment of non-refundable processing fee of Php300.00 in cash or check/money order payable to MAAP
- Photocopy of certification from principal that the applicant is graduating from Senior High School, if under K-12 Program
- Photocopy of ALS Certificate, if ALS Passer

Application Procedures

- Get MAAP scholarship application forms from any of the testing/ filing centers, Naval ROTC units, and PCG stations nationwide, or download at the MAAP website www.maap.edu.ph.
- Submit duly accomplished application form with the requirements to designated filing centers either by mail or in person
- Receive admission slip either by mail or in person
- *NOTE: Registration time for entrance examination starts at 0630H and ends at 0930H.*
- *Walk-in applicants are also entertained during the examination day.*

Admission Requirements

Applicants must pass/meet standards covering four stages:

- MAAP Entrance examinations consist of the aptitude, emotional intelligence, personality, psychological and neuro-psychiatric tests
- Graded personal interview in English to be conducted by the Screening Committee
- MAAP Medical criteria inclusive of physical, drug, lungs, dental, laboratory, audio test and color blindness test (ISHIHARA test), visual acuity for far vision should be at least 20/30
- Orientation training for two months (April-May) inclusive of refresher classes in Math, Physics, and English coupled with semi-regimental training program

ACADEMIC PROGRAMS

Academic Structure: 2-1-1 SCHEME and 3-1 SCHEME

COURSES	BSMT	BSMarE
Professional Education Core	85	88
General Education Core	63	57
Physical Education Courses	8	8
NSTP (NROTC Courses)	12	12
Seagoing Services	40	40
Total	208	205

Total minimum no. of units required by CHED for BSMT Program = 196
Total minimum no. of units required by CHED for BSMarE Program = 198
(*ref: CMO 20, series 2015*)

BSMT and BSMarE Program Educational Objectives

(Reference: CMO No. 20. Series of 2015 / Faculty Research Manual, 5th Edition

BSMT Program Educational Objectives (PEO)

The BSMT Program aims to:

1. Provide and equip students with knowledge, understanding, proficiencies, skills, competencies, attitudes and values to qualify and prepare them for assessment and certification as Officer-in-Charge of a Navigational Watch (OIC-NW) on seagoing ships of 500 gross tonnage or more; and
2. Produce graduates who are qualified to pursue a professional career or advanced studies in a related maritime field of specialization.

BSMarE Program Educational Objectives (PEO)

The BSMarE Program aims to:

1. Provide and equip students with knowledge, understanding, proficiencies, skills, competencies, attitudes and values to qualify and prepare them for assessment and certification as Officer-in-Charge of an Engineering Watch (OIC-EW) in a manned engine-room or designated duty engineer officer in a periodically unmanned engine room or sea-going ships powered by main propulsion machinery of 750 kW propulsion power or more; and
2. Produce graduates who are qualified to pursue a professional career or advanced studies in a related maritime field of specialization.

BSMT and BSMarE Program Outcomes (PO)

Program Outcomes (PO) for BSMT. The graduates of the BSMT program shall have acquired the knowledge and competence necessary to perform the following:

PO1: Demonstrate the ability to perform the competence, at the operational level under Section A-II/1 of the STCW Code.
PO2: Apply knowledge in mathematics, science and technology in solving problems related to the profession and the work place;
PO3: Work in a multi-cultural and/or multi-disciplinary team;
PO4: Understand professional and ethical responsibilities;
PO5: Communicate effectively in oral and written English;

PO6: Understand the impact and implications of various contemporary issues in the global and social impact of the profession;
PO7: Engage in lifelong learning and keep abreast with developments in the field of specialization and/or profession;
PO8: Use appropriate techniques, skills and modern tools in the practice of profession in order to remain globally competitive;
PO9: Conduct research using appropriate research methodologies; and
P10: Demonstrate all the required technical, behavioral, attitudinal competences as required by the Maritime Academy of Asia and the Pacific such as "Sea Skill" and other programs;

Program Outcomes (PO) for BSMarE. The graduates of the BSMT program shall have acquired the knowledge and competence necessary to perform the following:

PO1: Demonstrate the ability to perform the competence, at the operational level under Section A-III/1 of the STCW Code.
PO2: Apply knowledge in mathematics, science and technology in solving problems related to the profession and the work place;
PO3: Work in a multi-cultural and/or multi-disciplinary team;
PO4: Understand professional and ethical responsibilities;
PO5: Communicate effectively in oral and written English;
PO6: Understand the impact and implications of various contemporary issues in the global and social impact of the profession;
PO7: Engage in lifelong learning and keep abreast with developments in the field of specialization and/or profession;
PO8: Use appropriate techniques, skills and modern tools in the practice of profession in order to remain globally competitive;
PO9: Conduct research using appropriate research methodologies; and
P10: Demonstrate all the required technical, behavioral, attitudinal competences as required by the Maritime Academy of Asia and the Pacific such as "Sea Skill" and other programs.

BSMT Professional Core Courses

Function 1 – Navigation at the Operational Level

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
D111	Nav 1	Navigational Instruments with Compasses	4	3	4	7
D211	Nav 2	Terrestrial and Coastal Navigation 1	5	5		5
D311	Nav 3	Terrestrial and Coastal Navigation 2	5	3	6	9
D411	Nav 4	Celestial Navigation	3	2	3	5
D312	Nav 5	Operational Use of RADAR/ARPA	3	2	3	5
D511	Nav 6	Operational Use of ECDIS	2	1	3	4
D611	Nav 7	Voyage Planning	3	2	3	5
D212	D Watch 1	Collision Regulations	4	3	3	6
D313	D Watch 2	Deck Watchkeeping	3	3	1	4
		Total	32	24	26	50

Function 2 – Cargo Handling and Storage at the Operational Level

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
D423	Met-O1	Meteorology and Oceanography 1	5	5		5
D523	Met-O 2	Meteorology and Oceanography 2	4	4		4
D121	Seam 1	Ships, Ship Routines and Ship Construction	4	3	3	6
D221	Seam 2A	Trim, Stability and Stress 1	5	5		5
D321	Seam 2B	Trim, Stability and Stress 2	6	6		6
D421	Seam 3	Cargo Handling and Stowage Carriage (Non-dangerous Goods)	3	3	1	4
D521	Seam 4	Cargo Handling and Stowage (Dangerous Goods and Inspections)	3	3	1	4
D621	Seam 5	Ship Handling and Maneuvering	2	1	3	4
D422	IAMSAR	IAMSAR and Emergency Procedures	4	3	3	6
		Total	36	33	11	44

Function 3 - Controlling the Operation of the Ship and Care for Persons on Board at the Operational Level

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
D431	Marcom	Maritime Communications	3	2	3	5
D512	Mar Power	Basic Marine Engineering	4	4		4
D131/E142	*Mar Env	Protection of the Marine Environment	3	3		3
D531	Persman D	Leadership and Teamwork	3	3		3
D631/E642	*Mar Law	Maritime Law	4	4		4
		Total	17	16	3	19
D331	**Eng 3D	Speech Communication with IMO SMCP	3	3		3

Notes 1. *- common course with BSMarE; ** - General Education Course under Function 3
2. IT (Computer Applications and Networking) - a 3-unit General Education course under MarE Function 2 being undertaken by BSMT students

BSMarE Professional Education Core Courses

Function 1 – Marine Engineering at Operational Level

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
E211	Thermo	Thermodynamics	4	3	3	6
E212	Chem	Industrial Chemistry and Tribology	3	2	3	5
E311	PASGT	Propulsion Ancillary Systems & Gas Turbines	3	2	3	5
E412	PPD	Power Plant Diesel	5	4	3	7
E512	PPS	Power Plant Steam	6	5	3	8
E411	E Watch	Engine Watchkeeping with Resource Management	3	3	1	4
E312	Aux Mach 1	Auxiliary Machinery 1	6	5	3	8
E413	Aux Mach 2	Auxiliary Machinery 2	5	4	3	7
E511	Mech	Mechanics and Hydromechanics	3	3		3
		Total	38	31	22	53

Function 2–Electrical, Electronics and Control Engineering at the Operational Level

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
E221	Electro 1	Basic Electricity	4	3	3	6
E321	Electro 2	Marine Electronics & Electrical Maintenance	5	4	3	7
E422	Electro 3	Marine Electricity	5	4	3	7
E421	Auto 1	Basic Control Engineering	4	3	3	6
E621	Auto 2	Marine Automation	4	3	3	6
		Total	*22*	*17*	*15*	*32*
D522/E622	**IT*	*Computer Applications and Networking*	*3*	*2*	*3*	*5*

** - General Education subject under Function 2; Common course for BSMT and BSMarE*

Function 3 – Maintenance and Repair at the Operational Level

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
E131	Mar Draw	Marine Engineering Drawing	1		3	3
E132	E-Mats	Engineering Materials	4	4		4
E231	Mach 1	Hand and Measuring Tools	2	1	4	5
E331	Mach 2	Machining Tools	2	1	4	5
E431	Mach 3	Gas and Electric Welding	2	1	4	5
E631	Maint	Maintenance and Repair	3	2	3	5
		Total	14	9	18	27

Function 4 – Controlling the Operation of the Ship and Care for Persons on Board at the Operational Level

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
E141	Nav Arch	Naval Architecture	4	4	1	5
E641	Persman E	Leadership and Teamwork	3	3		3
E142	*Mar Env	Protection of the Marine Environment	3	3		3
E642	*Mar Law	Maritime Law	4	4		4
		Total	14	14	1	15
E341	**Eng 3E	Speech Communication with IMO SMCP	3	3		3

* Common course with BSMT; ** - General Education course under Function 4

Note: *Apart from these professional courses, BSMT and BSMarE students are required to undergo trainings such as Basic Safety (BT), Ship Security Awareness Training with Designated Security Duties (SAT and SDSD), Proficiency in Survival Craft and Rescue Boat (PSCRB), Medical Emergency First Aid (MEFA), and Advanced Training on Fire Fighting (ATFF) as in compliance to STCW 1978 as amended. (Ref. CMO 20 s. 2015)*

General Education Courses (Math and Sciences)

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
D161/E161	Math 1D/1E	College Algebra	3	3		3
D261	Math 2D	Plane and Spherical Trigonometry	3	3		3
	Math 2E	Plane Trigonometry and Solid Mensuration	3	3		3
D361	Math 3D	Solid Mensuration	3	3		3
E361	Math 3E	Calculus and Analytic Geometry	3	3		3
D561/E561	Stat	Introduction to Statistics	2	2		2
D171	Nat Sci 1D	General Physics	4	3	3	6
E171	Nat Sci 1E	Physics	4	3	3	6
D271	Nat Sci 2	Applied Physics	3	2	3	5
D272	Nat Sci 3	General Chemistry	3	2	3	5
		Total for BSMT Curriculum	21	18	9	27
		Total for BSMarE Curriculum	15	14	3	17

General Education Courses (Communications, Social Sciences, & P.E.)

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
D151/E151	Eng 1	Study and Thinking Skills	3	3		3
D251/E251	Eng 2	Writing in the Discipline	3	3		3
D651/E651	Eng 4	Research (Report Writing)	3	3		3
D451/ E152	Filipino 1	Komunikasyon sa Akademikong Filipino	3	3		3
D652/E551	Filipino 2	Pagbasa at PagsulatTungo sa Pananaliksik	3	3		3
D181/E583	Soc Sci 1	Politics and Governance with Philippine Constitution	3	3		3
D381/E281	Soc Sci 2	Society and Culture with Family Planning, STD, HIV, and AIDS Prevention	3	3		3

General Education Courses (Communications, Social Sciences, & P.E.) continued...

Ref. No.	Module	Descriptive Title	Units	Lec Units	Lab Units	Total Hrs
D481/E584	Soc Sci 3	General Psychology with Alcohol and Drug Prevention	3	3		3
D683/E682	Soc Sci 4	Basic Economic with Taxation and Agrarian Reform	3	3		3
D581/E681	Rizal	The Life and Works of Dr. Jose Rizal	3	3		3
D681/E581	Hum 1	World Culture and Geography	3	3		3
D682/E582	Hum 2	Ethics with Introduction to Logic	3	3		3
D191/E191	PE 1	Basic Swimming	2		2	2
D291/E291	PE 2	Advance Swimming	2		2	2
D391/E391	PE 3	Dual Sports	2		2	2
D491/E591	PE 4	Team Sports	2		2	2
		Total	44	36	8	44

Note: All Communications, Social Sciences and PE course are common for BSMT and BSMarE

BSMT PROFESSIONAL COURSE DESCRIPTIONS

Navigational Instruments with Compasses [Nav 1]

NAV1 satisfies the competencies "Plan and conduct a passage and determine position" under Function: Navigation at the operational level Table A-II/1 and "Determine and allow for compass error" under the function Navigation at the management level Table A-II/2 of the International Convention on Standards, Training, Certification and Watchkeeping (STCW) 1978 as amended. It also abides by the recommendations of the four pillars for maritime compliance. In addition, it integrates the MAAP Competency Management System.

The course is an introduction to theories and practices for safe navigation of ships in coastal waters and adjacent seas. It will provide knowledge to identify and the correct use of navigational instruments compasses and electronic navigational aids to determine ship's position.

Terrestrial and Coastal Navigation 1 [Nav 2]

NAV2 satisfies the competency "Plan and conduct a passage and determine position" under Function 1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance. In addition, it integrates the MAAP Competency Management System. The course is an introduction to theories and practices for safe navigation of ships in coastal waters and adjacent seas. It will provide knowledge and skills to identify the earth's geographic dimensions, her coordinate system, describe nautical charts use for navigation and explain the information from charts, list of light and other publication. The principles and rules of the International Association of Lighthouse Authorities (IALA), Maritime

Buoyage System, Systems "A" and "B" will be explained to the students.

Terrestrial and Coastal Navigation 2 [Nav 3]

NAV3 satisfies the competency "Plan and conduct a passage and determine position" under Function 1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance. In addition, it integrates the MAAP Competency Management System.

The course is an introduction to theories and practices for safe navigation of ships in coastal waters and adjacent seas. It will provide knowledge and skills of combining position lines using geometric principle, determine courses and distances by sailing formulas, doing chart works exercises and proper management of logs.

Celestial Navigation [Nav 4]

NAV 4 satisfies the competency "Plan and conduct a passage and determine position" under Function 1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance. In addition, it integrates the MAAP Competency Management System. The course is an introduction to theories and practices for safe ocean crossing navigation of ships.

Operational Use of RADAR/ARPA [Nav 5]

NAV 5 satisfies the competency "use of Radar" as part of the requirements of the STCW '78 as amended Chapter II, Section A-II/1 with the competent use of Radar and ARPA to maintain safety of navigation and the functional element provides the detailed knowledge, understanding and proficiency on the fundamentals of Radar and Automatic Radar Plotting Aids (ARPA), ability to operate and to interpret and analyze information obtained from radar and ARPA to obtain maximum performance for use in safe navigation.

Operational Use of ECDIS [Nav 6]

Operational Use of Electronic Chart Display System (ECDIS) satisfies the competency "Use of ECDIS to maintain the safety of navigation." under Function "Navigation at the operational level" of the STCW '78 as amended Table A-II/1. It also abides by the recommendations of the four pillars of the International Maritime Organization (IMO). In addition, it integrates the MAAP Competency Management System. The course intends to provide the, knowledge, skill and understanding of ECDIS and electronic charts to the thorough extent needed to safety navigate the vessels whose primary means of navigation is ECDIS. The course emphasizes both application and learning of ECDIS in a variety of underway contexts.

Voyage Planning [Nav 7]

NAV 7 satisfies the competency "Plan and conduct a passage and determine position."Under Function 1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of the IMO. In addition, it integrates the MAAP Competency Management System. In this course, the student shall acquire sufficient knowledge on the principles of voyage planning from Appraisal, Planning, Execution, and Monitoring of the voyage plan, and apply such knowledge through extensive simulations and exercises which will enhance their skills in navigating a ship safely and efficiently. Together with this, the integration of the Rules for Preventing Collision at Sea will furnish their proficiency for good seamanship.

Collision Regulations [D Watch 1]

Deck Watchkeeping 1 (COLREGS) satisfies the competency "Maintain a safe navigational watch" under Function 1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance. In addition, it integrates the MAAP Competency Management System. COLREGs intends to inculcate a thorough knowledge and understanding of the content, intent and application of the International Regulations Convention for Preventing Collisions at Sea.

Deck Watchkeeping [D Watch 2]

D Watch 2 covers parts of the requirements of the STCW 2010 Convention Chapter II, Section A-II/1. The functional element provides the detailed knowledge, understanding and application of steering and control systems as per Section A-VIII/2 Part 3, Part 4 and Part 4-1 of STCW '78 as amended, the use of information from navigational equipment for maintaining a safe navigational watch, blind pilotage and general principles for a ship reporting system and with VTS procedures. In addition, it integrates the MAAP Competency Management System.

Ship, Ship Routines, and Ship Construction [Seam 1]

SEAM1 satisfies the competency "Maintain the seaworthiness of the ship" under Function 3 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance. Seamanship 1 is an introduction to ships, ship construction and ship routines. The course will afford students to acquire knowledge, understanding and applications of ship dimensions and form, ship's stresses, hull, bow and stern structures, rudders and propellers and recognize the deck fittings, load lines and draft marks, rope and wire rope works to rig boatswain's chair, pilot ladder and stages. In addition, the students will grasp the rudiments of the duties and responsibilities of all the ship's personnel.

Trim, Stability and Stress 1 [Seam 2A]

SEAMANSHIP 2A (SEAM 2A) satisfies the competency "Maintain seaworthiness of the ship" and "Control trim, stability and stress" under Function 3 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of maritime compliance. In addition, it integrates the MAAP Competency Management System. SEAM 2A deals with static, dynamic and hydrostatic forces, displacement, calculations of area, volume, first and second moments, center of gravity and stability of ships. This principle of equilibrium is imperative to effect stable and seaworthy ship which requires knowledge of Newton's three (3) Laws of Motion.

Trim, Stability and Stress 2 [Seam 2B]

SEAM 2B satisfies the competencies "Control trim, stability and stress" under Function: "Controlling the operation of the ship and care for persons on board at the management level" of the STCW '78 as amended Table A-II/2. It also abides by the recommendations of the four pillars of maritime regulatory regime such as SOLAS, MARPOL, MLC 2006 and STCW.

SEAM 2B deals with dynamic stability concerning effect of wind and waves, free surface effect of liquid and the second moments of area; the IMO recommendations and rules of classification societies in determining various criteria of stability; the use of tables in determining the actual stresses and/or bending moments on the longitudinal length of the ship.

MAAP is offering this course over and above the CHED requirement (CMS) and IMO Model Course 7.01.

Cargo Handling and Stowage (Non-Dangerous Goods) [Seam 3]

SEAM 3 supports the competencies "Monitor the Loading, Stowage and Securing, Unloading of Cargoes and their Care During Voyage" and "Inspect and Report Defects and Damage to Cargo Spaces, Hatch Covers and Ballast Tanks" under Table A II/1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of the four pillars of maritime regulatory regime such as SOLAS, MARPOL, MLC 2006 and STCW 1978 as amended for seafarers and referred to IMO Model Course 7.03. In addition, it integrates the MAAP Competency Management System.

The course is an introduction to theories and practices for safe handling, stowage and securing of non-dangerous cargoes, and their effect on the safety of life and of the ship.

Cargo Handling and Stowage (Dangerous Goods and Inspections) [Seam 4]

Seamanship 4 satisfies the competencies "Monitor the Loading, Stowage and Securing Unloading of Cargoes and their Care During Voyage, "Inspect and Report Defects and Damage to Cargo Spaces, Hatch Covers and Ballast

Tanks," Plan and Ensure Safe Loading, Stowage, Securing, Care During the Voyage and Unloading of Cargoes and Carriage of Dangerous Goods under Functions: Cargo handling and stowage at the operational level Table A-II/1 and Cargo handling and stowage at management level Table A-II/2 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of maritime regulatory regime such as SOLAS, MARPOL 73/78, MLC 2006 and STCW 1978 as amended for seafarers and referred to IMO Model Course 7.01 and 7.03. In addition, it integrates the MAAP Competency Management System.

The course is an introduction to theories and practices for safe "Carriage of Dangerous Cargoes." It will provide skills in demonstrating knowledge and understanding of International Maritime Dangerous Goods (IMDG) Code, "International Regulations, Standards, Codes including The International Maritime Solid Bulk Cargoes (IMSBC) Code, Societe International for Gas Tankers and Terminal Operators (SIGTTO), and International Safety Guide for Oil Tankers and Terminals (ISGOTT).

Ship Handling and Maneuvering [Seam 5]

SEAM 5 satisfies in part competencies for the Function 3 (Controlling the Operation of the Ship and Care for Persons on board at the Operational Level) of STCW '78 as amended. It also abides by the recommendations of the four pillars of maritime regulatory regime such as SOLAS, MARPOL, MLC 2006 and STCW 2010.

Meteorology and Oceanography 1 [Met-O 1]

Met-O 1 satisfies the competency "Plan and conduct a passage and determine position" and "forecast weather and oceanographic conditions" under Function 1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance.

Met-O 1 tackles the introduction of shipborne meteorological instruments and basic knowledge of the structure of the atmosphere and its properties to be able to understand the weather systems, the distribution of water vapor and its behavior in the atmosphere, and other relevant topics.

Meteorology and Oceanography 2 [Met-O 2]

MET-O 2 satisfies the competency "Plan and conduct a passage and determine position" and "forecast weather and oceanographic conditions" under Function 1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance. Met-O 2 Lecture is a subject which tackles the thermodynamics of the Earth's atmosphere domain, Weather systems, the heat budget of the ocean, dynamic of ocean currents, tide-generating forces including energy exchanges

between the atmosphere and the seas. It offers competence-based philosophy for all merchant marine and naval officers alike, in interpreting meteorological phenomena to be able to assess and thereby reduce the associated risks to navigation, i.e. weather frontal system, storms, ice formation, abnormally strong "tidal stream," ocean currents and storm surges, among others.

IAMSAR and General Procedures [IAMSAR]

International Aeronautical and Maritime Search and Rescue (IAMSAR) abides by the requirements of the STCW '78 as amended, Table A-II/1 Function: Navigation at the operational level under the competence "Respond to a distress signal at sea." It tackles the necessary theories and practices regarding the organizations, operations and equipment in SAR.

Speech Communication with IMO SMCP [English 3D]

This Maritime English course supports the competency in "The use of English in written and oral form" under Table A-II/1 of STCW '78 as amended, which requires English proficiency in certifying officers who will be in charge of a navigational watch on ships of 500 gross tonnage and above. Maritime English is based on the IMO Standard Marine Communication Phrases (SMCP) that provides students the adequate knowledge of the technical English and maritime language and the use of the IMO SMCP in oral skills through various in-class and out-of-class activities. This course focuses primarily on the oral production of the marine communication phrases and on the vocabulary used in external communications among ships or between ship and the shore, and/or onboard communications during ship's operations and other safe conduct of the ship.

Maritime Communications [Marcom]

MARCOM covers the requirements of the STCW '78 as amended, Regulation II/4, appendix, paragraph 10 and the recommendation in the IMO/ILO Document for Guidance, 1985, and which was amended into regulation II/1 specifically Table A-II/1 in the new STCW Code.

A midshipman completing this module and successfully passing the prescribed examination will have sufficient knowledge of the Morse code and correct procedures to enable him to transmit and receive messages by Morse light. He will be able to demonstrate the use of the International Code of Signals. A midshipman completing Part 2 of this module and successfully passing the prescribed examination will have sufficient introductory knowledge of GMDSS systems and operational procedures. Given the severe problems being experienced in the GMDSS as a result

Given the severe problems being experienced in the GMDSS as a result of the large number of false distress alerts that now occur, instruction will also be provided in techniques to avoid the unintentional transmission of false distress alerts and the procedures to use in order to mitigate the effects of false distress alerts following unintentional transmission.

Basic Marine Engineering [Mar Power]

Basic Marine Engineering is primarily intended for Marine Transportation students as a major subject. The subject, in essence, provides students general knowledge and background about the function, operation, maintenance and safety procedures governing different engines and machineries normally installed on board ships. This subject is conducted for one school semester (18 weeks). It covers the following topics: Internal Combustion Engine–nomenclature and classification, two and four stroke cycle, supercharging, power rating, construction details and stationary moving parts.

Protection of the Marine Environment [Mar Env]

MARINE ENVIRONMENT (MAR ENV) satisfies the competency "Ensure compliance with pollution prevention requirements" of Function 4 for engine and Function 3 for deck of STCW '78 as amended. It also abides by the recommendations of the four pillars of Maritime Compliance.

Mar Env specifically focuses on the contribution of the human element to the prevention of pollution. It is intended to educate, stimulate and empower officers on board vessels to contribute to environmentally sound shipping and to ensure compliance with pollution prevention measures.

It includes topics on Marpol Annexes; Impact of pollution to sea; Anti-pollution procedures and equipment; Different marine pollution incidents; and Community immersion on marine environment protection. Mar Env is closely linked to both ISM Code and STCW Code.

Leadership and Teamwork [Persman D]

PERSMAN D satisfies the competency "Application of leadership and teamworking skills" under Function 3 "Controlling the operation of the ship and care for persons on board" at the operational level of the STCW '78 as amended. It also abides by the recommendations of the four pillars of maritime regulatory regime such as SOLAS, MARPOL, MLC 2006 and STCW. This course will provide knowledge to support the task, duties and responsibilities on board the ship in personnel management and contingency planning.

Maritime Law [Mar Law]

MARLAW satisfies in part the Function 3 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of maritime compliance. Maritime Law 1 is an introduction to Maritime Law. The course will afford students to know and understand the international and local laws governing maritime industry. The students are expected to analyze the implementation of STCW 78 as amended using SWOT analysis in the Philippine context; evaluate the SOLAS Convention as amended on how it would have prevented the Titanic disaster; recommend policies and procedures for specific provision under the ISM Code; and to illustrate the application of UNCLOS in determining the territorial boundaries.

BSMarE PROFESSIONAL COURSE DESCRIPTIONS

Thermodynamics [Thermo]

Thermodynamics is a 4-unit course required by the CHED in compliance to the STCW competence requirements under Table A-III/1-2. The course deals with the introduction of the properties of vapor and ideal gases and the development of the first law and second law of thermodynamics. The first and second law of thermodynamics are applied to simple gas and vapor power cycles. The objective of the course is to provide the students with fundamental understanding of the science of energy conversion and equip the students with basic tools and methodologies to evaluate the relative operation of marine engines.

Industrial Chemistry and Tribology [Chem]

Industrial Chemistry and Tribology lays the foundation for the competencies."Plan and schedule operations" and "Operation, Surveillance, Performance Assessment and Maintaining Safety of Propulsion Plant and Auxiliary Machinery" under table A-III/2 of the STCW '78 as amended including General chemistry (Including Appendix 5 Model course 7.04). It also integrates the MAAP Competency Management System.

Propulsion Ancillary Systems and Gas Turbines [PASGT]

PASGT involves the study of the Basic construction and operation principles of machinery systems of marine gas turbine; Preparation, operation, fault detection and necessary measures to prevent damage for the machinery items and control systems of marine gas turbine and associated auxiliaries; Design features, and operative mechanism of marine gas turbine and associated auxiliaries; Basic construction and operation principles of machinery systems including shafting installation, including propeller and

and design features, and operative mechanism of propeller shaft and associated ancillaries. The course covers the requirements of the 2010 STCW Convention Chapter III, Section A-III/1/2.

Power Plant Diesel [PPD]

Power Plant Diesel addresses the competence requirements specified under STCW2010 Table A-III/1 functions 1 i.e. Operate main and auxiliary machinery and associated control systems, Table A-III/2 functions 1; manage the operation of propulsion plant machinery, MARPOL 6 regulation 22 on energy efficiency and tasks as specified under MAAP Competence Management System (CMS) for BSMARE students. The 183 enabling learning outcomes are sourced from IMO MC 7.04 and 7.02 as required by CMO 20 s. 2015, 67 elements of MAAP CMS and 17 EOs added (16 for skill development and one from SEEMP as required under MARPOL 6 regulation 22).

Power Plant Steam [PPS]

PPS (Lecture and laboratory) is primarily a major course under the BSMarE program. The course principally deals with the basic principles, construction, operation and safety procedures and maintenance of Marine steam boilers and turbines. This course is conducted for one school semester (18 weeks). The substance and structure of this course adheres with the CHED-prescribed syllabus on Marine Power Plant, Turbine (REF NO: E64) for BSMT and BSMarE.

The course addresses the competence requirements specified under STCW Convention and it Amendments Table A-III/1 functions 1 and 2 on marine steam boilers and under MARPOL 6 regulation 22 for emission of carbon dioxide. It also includes competencies based on MAAP's Competency Management System or "Sea Skill".

Engine Watchkeeping with Resource Management [E Watch]

E Watch addresses the competency "Maintain a Safe Engineering Watch" under Function Marine engineering at the operational level Table A-III/I of the STCW '78 as amended. In addition, the MAAP Competency Management System is integrated in the course.

The course is an introduction to theories and practice for maintaining a safe engineering watch onboard a ship. It will provide knowledge, understanding, to students on how to conduct engine watchkeeping duties taking into account the safe operations and immediate actions to be taken in case of emergencies.

Auxiliary Machinery 1 [Aux Mach 1]

AUX MACH supports the competency "Operate Main machinery, Auxiliary machinery and associated control system, Operate Pumping system and associated control system" under Table A-III/1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of the IMO. In addition, it integrates the MAAP Competency Management System. The course includes Pumps and Marine pumping systems, Heat Exchanger, Evaporators, Air Compressors, Oil-water separator, sewage treatment system, Pipes and Fittings and valves.

Auxiliary Machinery 2 [Aux Mach 2]

Auxiliary Machinery 2 is one of the pillars which lead to the competencies "Operate main and auxiliary machinery and associated control system", "Operation, Surveillance, Performance Assessment and Maintaining Safety of Propulsion plant and Auxiliary Machinery" and "Plan and schedule operation"(Table A-III/1 and Table A-III/2) of STCW '78 as amended in 2010. In addition, it integrates the MAAP Competency Management System.

The course prepares students to deal with duties and responsibilities of an engineer officer in charge of the engineering watch on ship's auxiliary machinery. Emphasis will be placed on knowledge, understanding and skills of Steering gear, Purifier and Marine Refrigeration system.

Mechanics and Hydromechanics [Mech]

MECH satisfies the competency "Maintain a safe engineering watch" under Function 1 of the STCW '78 as amended. The course is an application of the theories and concepts taken in physics both for solids and fluids. It will provide knowledge and skills to solve resultant and equilibrant of force systems, locate analytically the centroid of lamina and center of mass of loads, apply dynamics of rectilinear translation on real-world problems, predict the effect of friction on contiguous surfaces, apply Pascal's Principle in calculating force due to fluid pressure on plane and curved surfaces, apply Archimedes' Principle in statical stability of a ship and apply the Bernoulli's Energy Theorem on fluids in motion.

Basic Electricity [Electro 1]

Electro 1 is a course for students to acquire the necessary knowledge, understanding and applications of the basic concepts in the field of electrical engineering in order to perform the competences of "operating electrical, electronic and control engineering systems" and "maintenance and repair of electrical and electronic equipment" under Function II of A-III/1 of the

STCW '78 as amended. It integrates the subject matter content based on IMO Model Course 7.04 and some of the theoretical contents under IMO Model Course 7.02. It also includes the specific competencies under MAAP's Competency Management System.

Marine Electronics and Electrical Maintenance [Electro 2]

Electro 2 leads to the competencies "maintain a safe engineering watch, operate electrical, electronic and control systems, maintenance and repair of electrical and electronic equipment and manage operation of electrical and electronic control equipment under Table A-III/1 and Table A-III/2 of the STCW '78 as amended. It integrates the subject matter content based on IMO Model Course 7.04 and some of the theoretical contents under IMO Model Course 7.02. In addition, it integrates the MAAP Competency Management System.

The course aims to introduce basic marine electronics in general to the student, specifically, the acquisition of knowledge on, as basic as it is, the principles concerned with the operations of various electronic components, thyristors, Programmable Logic Controller (PLC) and circuit as building block for various marine electronic switching and control systems; develop the skills in interpreting electronic symbols, diagrams and operations; use of measuring instruments for simple troubleshooting and design; construct and commission simple electronic circuit.

Marine Electricity [Electro 3]

Electro 3 is a course for students to acquire the necessary knowledge, understanding and the basic configuration and operating principles of electrical, electronic and control equipment on board merchant marine vessels in order to perform the competencies of "Operate electrical, electronic and control engineering systems and maintenance and repair of electrical and electronic equipment" under Function 2 of A-III/2 and A-III/1 of the STCW '78 as amended.

Basic Control Engineering [Auto 1]

AUTOMATION 1 (AUTO1) is a preparatory course for students to acquire the necessary basic knowledge and understanding in the principles behind process and machine automation in preparation to the competencies of operating electrical, electronic and control engineering systems and maintenance and repair of electrical and electronic equipment's under A-III/1 of the STCW '78 as amended. It integrates the subject matter contents based on IMO Model Course 7.04 and some of the theoretical contents under IMO Model Course 7.02. It also includes the specific competencies under

this function based on MAAP's Competency Management System.

Being a preparatory course for Automation 2 "Marine Automation", it prepares students to the principle of operations of various process measuring sensors and instruments, control theories (PID), final control devices, transmission of signals and use of Information technology in control systems. It also intends to develop in each individual the skills to draw and interpret Process Instrumentation Diagram (P&ID) diagrams and the basic analytical skills to design basic control loops.

Marine Automation [Auto 2]

MARINE AUTOMATION supports the competencies of "Operate electrical, electronic and control systems" and "Maintenance and repair of electrical and electronic equipment" under the STCW '78 as amended. It integrates the subject matter content based on IMO Model Course 7.02 and 7.04. It also includes the specific learning outcome under MAAP's Competency Management System. This course includes topics of the ships' main engine and auxiliary engines automated systems, safety and maintenance while doing maintenance, fault location and fault protection. This also includes pneumatic and hydraulic principles and their onboard applications for both deck and engine machinery operations. It tends to develop in students the skills to interpret electric, pneumatic, hydraulic instrumentation and control diagrams.

Computer Applications and Networking [IT]

Computer Applications And Networking (Information Technology) supports the competencies "operate computers and computer networks on ships" and "use internal communication systems" stated in Function 2 Table A-III/6 of STCW '78 as amended.

IT covers the terminologies, concepts and technologies regarding the fundamentals of computer systems, information technology and networking environments. It provides basic knowledge and skills on communications network that shall enable the students to apply these technologies in their field and place of work. Further, it engages in the conceptualization and application of information technology in the maritime field.

Maritime Drawing and Diagrams [Mar Draw]

MAR DRAW supports the competency "Maintenance and repair of shipboard machinery and equipment" under Table A-III/1 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of the IMO. It also integrates the MAAP Competency Management System.

This course intends to develop the basic skills of the students in marine engineering drawing, which include the types of drawing, line work, pictorial projection, development, dimensioning, geometrical tolerances, limits and fits, engineering drawing practice and systems diagrams.

Engineering Materials [E-Mats]

E-Mats complies with the STCW competence requirements under Table A-III/1-2. The course involves the study of the different properties and specific uses of materials (ferrous and non-ferrous), and treatment for repair and fabrication of the various materials found on board ships.

Hand and Measuring Tools [Mach 1]

MACH 1 (LECTURE & LABORATORY) satisfies the function of "Maintenance and Repair at the operational level under the competences of appropriate use of hand tools, machine tools and measuring instruments for fabrication and repair on board. The preliminary parts of the course mainly deal with the safety in the machine shop in general. The main and final parts of the subject focus on various hand and power tools. This also includes a great deal of practical involvement of students in workshop laboratory.

The learning style is intended to be a mixture of lectures, briefing and debriefing, demonstrations on practical or work-related applications.

Further, the course covers the assessment of students by monitoring the students' ability to work with machine tools and equipment, and machinery through practical exercises and requiring them to submit projects.

Machining Tools [Mach 2]

MACH 2 satisfies the function 3 "Maintenance and Repair at the operational level under the competence of appropriate use of hand tools, machine tools and measuring instruments for fabrication and repair on board"; Table A-III/1 of STCW '78 as amended. In addition, it integrates the MAAP Competency Management System.

Gas and Electric Welding [Mach 3]

MACH 3 satisfies the function 3 "Maintenance and Repair at the operational level under the competence of appropriate use of hand tools, machine tools and measuring instruments for fabrication and repair on board";Table A-III/1 of STCW '78 as amended. In addition, it integrates the MAAP Competency Management System.

Maintenance and Repair [Maint]

MAINT satisfies the competency "Maintenance and repair of shipboard machinery and equipment" under Function 3 of the STCW '78 as amended. It also abides by the recommendations of the four pillars of the Maritime Compliance.

Naval Architecture [Nav Arch]

NAV ARCH satisfies the competency "Maintain the seaworthiness of the ship" under Function 4 of the STCW '78 as amended. It also abides by the recommendations of the four pillars for maritime compliance. Nav Arch is an introduction to ships, ship construction. The course will afford students to acquire knowledge, understanding and applications of ship dimensions and form, hull, bow and stern structures, rudders and propellers, recognize the deck fittings, load lines, draft marks and basic stability of the ship.

Speech Communication with IMO SMCP [English 3E]

At the end of the course, the student must be able to use the IMO Standard Marine Communication Phrases and use English language in oral communications to possess mastery of the maritime technical vocabulary and to be familiar with the communication situations onboard.

Leadership and Teamwork [Persman E]

PERSMAN E satisfies the competency "Application of leadership and teamworking skills" under Function 4 "Controlling the operation of the ship and care for persons on board" at the operational level of the STCW '78 as amended. It also abides by the recommendations of the four pillars of maritime regulatory regime such as SOLAS, MARPOL, MLC 2006 and STCW. This course will provide knowledge to support the task, duties and responsibilities on board the ship in personnel management and contingency planning. This course intends to develop the basic skills in troubleshooting with great consideration to safety, inherent hazards and proper procedures in performing maintenance and repair. It includes the safety measures prior to maintenance and repair, emergency and temporary repairs, basic mechanical knowledge and skills, dismantling, adjustment and reassembling of machinery and equipment, usage of special tools and planned maintenance system.

GENERAL EDUCATION COURSE DESCRIPTIONS

College Algebra [Math 1D]

MATH 1D is a foundation course, for the BSMT degree program, in support of the maritime profession. College Algebra for marine transportation deals on how to carry out various practical algebraic computations and its applications that are generally needed in the maritime professions. This involves the fundamental concepts of operations on algebraic expressions including simple fractions, exponents, radicals, special products, factoring, polynomials, linear equations and simultaneous linear equations in two unknowns; quadratic equations with real roots and its discriminant; absolute and relative error; percentage error of areas and volumes; functions, linear and quadratic equations; proportion, variation and interpolation.

College Algebra [Math 1E]

MATH 1E is a foundation course, for the BSMarE program, which covers the teaching required to support marine engineering knowledge, understanding and proficiency for Officer in Charge of an Engineering Watch (IMO Model Course 7.04) and second engineer officer (IMO Model Course 7.02).

College Algebra deals on how to carry out various practical algebraic computations and manipulations within the fundamental operations that are generally needed in the maritime professions.

Part I involves the fundamental concepts of real numbers including operations with positive and negative integers, fractions, ratio, proportion, variations, decimals both terminating and non-terminating, significant figures, laws of exponents, use of logarithm tables and names and symbol for prefixes.

Part II includes the concept on Algebraic expressions, polynomials, special products and Factoring, Rational Expressions, Linear, Quadratic and Systems of Equations.

Plane and Spherical Trigonometry [Math 2D]

MATH 2D is a course required by the Philippine CHED leading to the BSMT degree program. It supports students' acquisition of marine transportation knowledge, understanding and proficiency. The first part of the course, Plane Trigonometry covers trigonometric functions, and solutions of plane triangles and their applications to real-world problems. The second part of the course, Spherical Trigonometry deals with solutions of spherical triangles and their applications to real-world problems.

Plane Trigonometry and Solid Mensuration [Math 2E]

MATH 2E is a foundation course, for the BSMarE program, in support of the maritime profession. The first part of the course, Plane Trigonometry covers trigonometric functions, and solutions of plane triangles and their applications to real-world problems. The second part of the course, Solid Mensuration, provides students with the technical and analytical knowledge on various planes and solids to enable students to visualize, analyze, and solve for the area and centroid of a plane figure or for the volume of a solid.

Solid Mensuration [Math 3D]

MATH 3D provides the BSMT students with the technical and analytical knowledge on various planes and solids to enable students to visualize, analyze, and solve for the area of a plane figure or for the volume of a solid, and centroid of a waterplane or shipshape.

Calculus and Analytic Geometry [Math 3E]

MATH 3E, a course required marine engineering students, supports the BSMarE program and covers lines, conic sections, basic differentiation and integration of algebraic functions and problems involving optimization, related rates, and areas between curves. It will provide knowledge and skills to better understand the principles and theories of certain areas in marine engineering. The course will be treated as an application course. No proving of theorems will be done. As much as possible, applications will be geared towards the maritime industry.

Introduction to Statistics [Stat]

The course provides an understanding of the basic statistical techniques. This will give the students the opportunity to be familiar with descriptive and inferential statistics. This will provide the students the foundation in statistics and practical data processing applicable for their future research.

General Physics [Nat Sci D]

Nat Sci 1D (General Physics), a course for the marine transportation students, supports the maritime education and training through the basic fundamentals and concepts of different laws, theories and principles of Physics that the BSMT students may use for their maritime professional courses. The course deals on the basic concepts of metrology, Newton's Laws, mechanical properties of materials, work and energy principles and heat and temperature. It will provide knowledge and skills to the students for them to apply and design investigatory project with the application of different principles and laws in Physics.

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Physics [Nat Sci 1E]

NAT SCI 1E (PHYSICS) is a course intended for BSMarE students as part of the general education in support to maritime profession. This 4-unit (3-unit lecture, 1-unit laboratory) course runs for one semester and covers General Physics in reference to CMO No. 20, Series of 2015. This course includes the principles and applications of fundamental concepts in Metrology, Laws of Motion, Electricity and Fluid Mechanics. The laboratory part focuses on activities and experiments that apply and strengthens the said topics.

Applied Physics [Nat Sci 2]

This course is intended for BSMT students as part of the general education in support to maritime profession. This 3-unit (2-unit lecture, 1-unit laboratory) course runs for one semester and covers Applied Physics in reference to CMO No. 20, Series of 2015. This course includes the principles and applications of concepts in Fluid Mechanics; Electricity; Electromagnetism; and Waves. Furthermore, the course utilizes fundamental topics developed in Nat Sci 1 (General Physics) to study and apply the lessons included in this course.

The laboratory part focuses on activities that apply the principles and applications of concepts in Fluid Mechanics; Electricity; Electromagnetism; and Waves.

General Chemistry [Nat Sci 3]

Nat Sci 3 is a preparatory course, for the BSMT program, in support to other courses in the maritime education and training and in real-life situations. It is an introduction to the fundamentals/principles of chemistry and their corresponding applications on ship operation. It will provide the knowledge needed to correctly treat, use, and store all substances and

materials in liquid, solid, or in gas form generally carried on ships; as well as skills in dealing with problems arising from the use of chemicals that affect the operations of the ship and the natural environment.

The course provides the opportunity to learn basic skills in the utilization of measuring instruments and apparatuses for chemical testing and experimenting which includes development and application of laboratory procedures for different principles and laws in chemistry.

Study and Thinking Skills in English [English 1]

English 1 serves as a foundation to satisfy the competency "to possess adequate knowledge of the English language to enable the officer to use charts and other nautical publications, to understand meteorological information and message concerning ship's safety and operation, to communicate with other ships and coast stations and to perform the officer's duties also with a multi-lingual crew, including the ability to use and understand the Standard Marine Navigational Vocabulary as replaced by the IMO Standard Marine Communication Phrases" under Section A-II/2 of the STCW '78 as amended.

This course aims to enhance students' competence in reading, to develop fluency in communication, and to strengthen their study and critical thinking skills. This course will help students to acquire and explore various strategies that are appropriate to brace their unique learning abilities and in order to compensate their weaknesses in academic reading and writing. Likewise, students are taught how to utilize appropriately the library and technological resources accessible to present, acquire and analyze information that will aid them to perform efficiently in their academic field and even beyond.

Writing in the Discipline [English 2]

English 2, a 3-unit course of lecture, is designed to meet the requirements of an outcomes-based education (OBE) program required of the Maritime Education and Training. It supports the requirement of STCW '78 as amended Table A-II/1 and Table A-III/1 at the operational level, which is competence in the use of English in written and oral form. Further, it is anchored on the objectives set in the IMO Model Course 3.17.

English 2, includes lessons that aim to hone the communicative skills of the students through writing, so the students can function effectively and efficiently in their academics and in their future profession. The chunk of the course focuses on writing essays and correspondences and accomplishing different maritime reports to expose the students to the different communicative tasks undertaken on board, thereby helping them

to gain confidence and to prepare them for the different communications in and out of their respective vessels.

Research (Report Writing) [English 4]

ENGLISH 4 enhances the minimum requirements on the use of the English language of the STCW '78 as amended. It is a research and writing course wherein students are expected to use both primary and secondary sources to write an original research paper. The course introduces the students to the research process and the implementation of analysis using statistical tools and research skills into writing. It is designed to provide the students the venue to conduct research concerning issues on maritime education, the environment, the maritime industry in general or the MAAP community. It includes student-centered classroom activities, conduct of experiment, documentation, data gathering, consultation, manuscript writing, revisions, and paper presentations. The focal point of the course is not limited to the writing skills in English, but extended to the oral communication skills for the students are required not only to write a research report but also to orally present their research in a conference-style format. Essentially, this course aims to nurture research culture and the commitment for life-long learning among the students.

Komunikasyon sa Akademikong Filipino [Fil 1]

Filipino 1 ay binubuo ng mga aralin at paksa alinsunod sa itinalaga ng CHED. Ang asignaturang ito ay tatalakay sa paglinang ng mga kasanayang pangwika sa aspeto ng: pakikinig, pagsasalita, pagbabasa at pagsusulat na tumutugon sa propesyon ng mandaragat salig sa Kartilya ng mga Bagong Kurso sa Filipino sa pamamagitan ng CMO No. 20 s. 2013.

Tatalakayin sa asignaturang ito ang tungkol sa apat na kasanayan ng komunikasyon tulad ng pakikinig, pagsasalita, pagbabasa at pagsusulat. Nakatuon ito sa estruktura, gamit, katangian at kahalagahan ng wikang Filipino sa akademikong larangan.

Pagbasa at Pagsulat Tungo sa Pananaliksik [Fil 2]

Filipino 2 ay binubuo ng mga aralin at paksa alinsunod sa itinalaga ng CHED. Ang asignaturang ito ay nagsasaad na maituro ang wikang Filipino sa iba't ibang antas at larangan. Ito ay tumutugon sa propesyon ng mandaragat salig sa Kartilya ng mga Bagong Kurso sa Filipino sa pamamagitan ng CMO No. 20 s. 2013. Ang Filipino 2 ay nilalayong magkaroon ng kasanayan sa pagbasa at pagsulat tungo sa larangan ng iba't ibang disiplina. Upang magkaroon ng mataas na antas ng paggamit ng Filipino sa kritikal, lohikal at mapanuring pag-iisip lalo na sa iba't ibang larangan ng kurso.

Politics and Governance with Philippine Constitution [Soc Sci 1]

SOC SCI 1 covers the CHED-prescribed syllabus pertaining to the provisions of Republic Act (RA) No. 7722 otherwise known as the Higher Education Act of 1994, and pursuant to CMO No. 13 and 14 Series 2013 as amended by CMO no. 31 and 32 series of 2013. This course is a requirement as part of all baccalaureate degree programs in all Higher Education Institutions in the Philippines, including BSMT and BSMarE.

Social Science 1 deals with the study of the governments of selected countries (where Philippine maritime workers operate) and the 1987 Constitution. Provisions of the National Territory, Citizenship, Bill of Rights, Legislative Department, Executive Department, Judicial Department, the Constitutional Commission, Selected Provision of the New Family Code and the Agencies of the Government that directly affect the Operations of the Maritime Industry are the emphasis of this course. These provisions will be applied to social and maritime related issues in order to prepare them as future leaders in the maritime industry.

Society and Culture with Family Planning, STD, HIV and AIDS Prevention [Soc Sci 2]

Social Science 2 entails the study of the nature of society and culture in general, and their relationships including notions, characteristics and elements in particular. The course also includes the study of STD and HIV-AIDS and their prevention under the pretext of family planning. Ultimately, Soc Sci 2 delves on the study of man and his environment especially in the maritime field context. It is the intention of the course to provide the student the necessary concepts and information to equip him or her for professional and/or for personal journey.

General Psychology with Alcohol and Drug Prevention [Soc Sci 3]

SOC SCI 3 satisfies the competency" Application of Leadership and Teamwork skills" of the STCW '78 as amended. This course is an introduction to the scientific study of behaviour and mental processes in the organization. It will cover the principles of human behaviour relating to Psychology as Science, Biology and Psychology, Psychology of Learning, Personality: Theory and measurement, Psychological Disorder and Therapy, Social Psychology, Alcohol and Drug Abuse Prevention. The students will be able to appraise behaviour and create an environment conducive for working in a global community. Moreover, it is important to note that as required, Soc. Sci. 3 is one of the vehicles in conducting education on Alcohol and Drug Abuse Prevention.

Basic Economics with Taxation and Agrarian Reform [Soc Sci 4]

Soc Sci 4 satisfies in part the requirements of the CMO No. 20, s. 2015 General Education Curriculum (GEC): Understanding, Intellectual and Civic Competencies. The GEC aims to expose students to various domains of knowledge and ways of knowledge and ways of comprehending social and natural realities, developing in the process, intellectual competencies and civic capabilities. The course further complies with CMO 13 and 14 series of 2013 amended and supplemented by CMO 31 and 32 series of 2013. Thus the programs in which this course is offered lean towards the competency based direction in the teaching-learning process.

This course reinforces students' knowledge of society and how it operated economically in their behalf and as to how the system operates including understanding of the principles and systems utilized by the country and sometimes by other countries especially with reference to international trade. It also introduces the students to the necessity of taxation and of apportioning land to the landless in support of economic development.

The Life and Works of Dr. Jose Rizal [Rizal]

RIZAL covers the requirements of the CHED CMO No. 59 series of 1996 in updating the GEC to make it more responsive to the needs of the students in this Region, in concurrence with Republic Act 1425 known as Rizal Law. This course deals with life and works of the Philippine national hero. It includes his travels to and activities in other countries. In addition it will provide the students an in-depth appreciation of the relevance of Rizal's socio-political thoughts to the emergence of nationhood. The students are expected to emulate and appreciate Rizal's life in the light of his education, experiences, writings and future profession as they influence the contemporary life of the Filipinos and therefore will acquire a strong sense of national identity and will live with insights.

World Culture and Geography [Hum 1]

World Culture and Geography reinforces students' knowledge in *physical and human aspects of geography* through an organized understanding of the world with the *geographic themes*. It also enhances the *awareness regarding different cultures* thereby distinguishing the cultural differences for the students to be more *open-minded, tolerant and appreciative* of cultures other than theirs. This would help them make *sound value judgments* on pertinent matters.

Ethics with Introduction to Logic [Hum 2]

HUMANITIES 2 (HUM2) satisfies in part the requirements of the CMO No. 20 s. 2013 GEC: Understanding, Intellectual and Civic Competencies. The course further complies with CMO 20 s. 2015. Thus, the programs in which this course is offered lean towards the competency-based direction in the teaching-learning process.

The course is an introduction to the philosophical study of morality, including some principles on right and wrong behavior as well as value, i.e., goodness and badness. Thus, it is an introduction to philosophy focused on ethical thinking. It provides some guidelines about the main issues of applied Ethics as well. Being a theoretical inquiry into the standards of right and wrong or good and bad, Ethics deals with morality insofar as it embodies a set of rules already accepted or formulated for potential acceptance. In the study of morality Ethics primarily describes, analyzes and criticizes different moral codes as to their consistency, viability and legitimacy. The course envisions better norms based on human ability to learn and get a better insight into the nature of one's own conduct.

The course consists of General Ethics and Special Ethics. General Ethics presents truths about human acts that derive the nature and principles of morality, the significance of moral action to the daily life and to life's ultimate meaning. Special Ethics deals with the application of moral principles to problems and issues confronting the individual due to his particular status in life, particularly in the maritime profession.

Basic Swimming [P.E.1]

This Physical Education course (PE 1) satisfies the competency "Survive at sea in the event of ship abandonment under Function 3 of STCW '78 as amended. PE 1 is a course designed to enable the students to learn the fundamentals of swimming which is a preparatory for basic safety training. Theoretical aspect as well as the application of such theories will be employed. Students will learn how to swim using freestyle and backstroke as basic survival technique.

Advanced Swimming [P.E.2]

SWIMMING 2 (PE 2) satisfies the competency "Survive at sea in the event of ship abandonment under Function 3 of the STCW '78 as amended. It also abides by the recommendation of the four pillars of the IMO. In addition, it integrates the MAAP Competency Management System.

PE2 is designed to enable the students to learn the fundamentals of swimming. Theoretical aspect as well as the practical application of such theories will be developed. Example of this is the advanced swimming skills and techniques. It also intends to provide the students the requirements of survival swimming while at the same time fostering physical fitness recreational activity.

The elements covered in this subject should be useful and beneficial to the students in their lives as seafarers. The same holds true if and when they decide to leave such profession. The subject is composed of three parts. The first part is a discussion about swimming, taken generally then going to specific items. Also dealt with in this part is an explanation of the responsibilities of the officiating personnel in a swimming competition. It is conducted in a classroom. The second part is conducted in the pool. It is mainly an explanation and a demonstration of a skill by the instructor and learning a skill by the students. This part includes breath – holding and floating. It is a part preparatory to the third and last part. The last part, like the second part, is an explanation and a demonstration of underwater swimming, the breaststroke and the butterfly stroke. The learning style of the students is, like the learning style employed in any other skills development, participative.

Dual Sports [P.E.3]

PE 3 supports the competency "Application of leadership and team working skills" Table A-II/1 and Table A-III/1 of the STCW '78 as amended. The course is designed to give the students the opportunity to learn techniques in and to play dual sports. Students will develop sportsmanship and positive behaviours in fitness, wellness, and movement activity.

Team Sports [P.E.4]

PE 4 supports the competency "Application of leadership and team working skills" Table A-II/1 and Table A-III/1 of the STCW '78 as amended. Team Sports is designed to enable the students to learn the fundamentals of basketball, volleyball, soccer, and sepak takraw. Theoretical aspect as well as the practical application of such theories will be developed. Examples of these are the passing and dribbling skills and techniques in basketball; spiking in volleyball; and other techniques in the other ball games. The students will deal on the compositions of the teams in all these sports.

CURRICULUM FOR BSMT—Batch 2020

FIRST YEAR

First Semester

Ref. No.	Module	Descriptive Title	Units	Lec Hrs	Lab Hrs	Total Hrs
D111	Nav 1	Navigational Instruments with Compasses	4	3	4	7
D121	Seam 1	Ship, Ship Routines and Ship Construction	4	3	3	6
D131/E142	Mar Env	Protection of the Marine Environment	3	3		3
D151/E151	Eng 1	Study and Thinking Skills in English	3	3		3
D161	Math 1D	College Algebra	3	3		3
D171	Nat Sci 1D	General Physics	4	3	3	6
D181/E583	Soc Sci 1	Politics and Governance with Philippine Constitution	3	3		3
D191/E191	P.E. 1	Basic Swimming	2		2	2
	NSTP		(3)			(3)
		SEMESTER TOTAL	**26**	**21**	**12**	**33**

Second Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
D211	Nav 2	Terrestrial and Coastal Navigation 1	Nav 1	5	5		5
D212	DWatch1	Collision Regulations		4	3	3	6
D221	Seam 2A	Trim, Stability and Stress 1	Seam 1	5	5		5
D261	Math 2D	Plane and Spherical Trigonometry		3	3		3
D251/E251	Eng 2	Writing in the Discipline	Eng 1	3	3		3
D271	Nat Sci 2	Applied Physics	Nat Sci 1	3	2	3	5
D272	Nat Sci 3	General Chemistry		3	2	3	5
D291/E291	P.E. 2	Advanced Swimming	P. E. 1	2		2	2
	NSTP			(3)			(3)
		SEMESTER TOTAL		**28**	**23**	**11**	**34**

Summer

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
	Safety 1	Basic Training (BT)					
		SAT, SDSD					

SECOND YEAR

Third Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
D311	Nav 3	Terrestrial and Coastal Navigation 2	Nav 2 & Math 2	5	3	6	9
D312	Nav 5	Operational Use of RADAR/ ARPA	D Watch 1	3	2	3	5
D313	D Watch 2	Deck Watchkeeping	D Watch 1	3	3	1	4
D321	Seam 2B	Trim, Stability and Stress 2	Seam 2A	6	6		6
D331	Eng 3D	Speech Communication with IMO SMCP	Eng 2	3	3		3
D361	Math 3D	Solid Mensuration	Math 2	3	3		3
D381/E281	Soc Sci 2	Society and Culture with Family Planning, STD, HIV, and AIDS Prevention		3	3		3
D391/E391	P.E. 3	Dual Sports		2		2	2
	NSTP			(1.5)			(1.5)
		SEMESTER TOTAL		**28**	**23**	**12**	**35**

Fourth Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
D411	Nav 4	Celestial Navigation	Nav 3	3	2	3	5
D421	Seam 3	Cargo Handling and Stowage (Non-Dangerous Goods)	Seam 2B	3	3	1	4
D422	IAMSAR	IAMSAR and Emergency Procedures		4	3	3	6
D423	Met-O 1	Meteorology & Oceanography 1		5	5		5
D431	Marcom	Maritime Communications		3	2	3	5
D451/E152	Fil 1	Komunikasyon sa Akademikong Filipino		3	3		3
D481/E584	Soc Sci 3	General Psychology with Alcohol and Drug Prevention		3	3		3
D491/E591	P.E. 4	Team Sports		2		2	2
	NSTP			(1.5)			(1.5)
		SEMESTER TOTAL		**26**	**21**	**12**	**33**

Summer

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
	Safety 2	PSCRB					

THIRD YEAR

Fifth Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
D511	Nav 6	Operational use of ECDIS	Nav 5	2	1	3	4
D512	Mar Power	Basic Marine Engineering		4	4		4
D521	Seam 4	Cargo Handling and Stowage (Dangerous Goods & Inspections)	Seam 2B	3	3	1	4
D522/E622	IT	Computer Application and Networking		3	2	3	5
D523	Met-O 2	Meteorology and Oceanography 2	Met-O 1	4	4		4
D531	Persman D	Leadership and Teamwork		3	3		3
D561/E561	Stat	Introduction to Statistics		2	2		2
D581/E681	Rizal	The Life and Works of Dr. Jose Rizal		3	3		3
	NSTP			(1.5)			(1.5)
		SEMESTER TOTAL		**24**	**22**	**7**	**29**

Sixth Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
D611	Nav 7	Voyage Planning	Nav 6	3	2	3	5
D621	Seam 5	Ship Handling and Maneuvering	D Watch 1	2	1	3	4
D631/E642	Mar Law	Maritime Law		4	4		4
D651/E651	Eng 4	Research (Report Writing)	Eng 3	3	3		3
D652/E551	Fil 2	Pagbasa at Pagsulat Tungo sa Pananaliksik	Fil 1	3	3		3
D681/E581	Hum 1	World Culture and Geography		3	3		3
D682/E582	Hum 2	Ethics with Introduction to Logic		3	3		3
D683/E682	Soc Sci 4	Basic Economics with Taxation and Agrarian Reform		3	3		3
	NSTP			(1.5)			(1.5)
		SEMESTER TOTAL		**24**	**22**	**6**	**28**

Summer

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	LabHrs	Total Hrs
	Safety 2	MEFA	Safety 1				
		ATFF					

FOURTH YEAR

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
	Ship-board Training	1-year Seagoing Service, Documented in an Approved Onboard Training Record Book and Includes at Least Six (6) Months Bridge Watchkeeping Duties		40			

CURRICULUM FOR BSMarE—Batch 2020

FIRST YEAR

First Semester

Ref. No.	Module	Descriptive Title	Units	Lec Hrs	Lab Hrs	Total Hrs
E131	Mar Draw	Maritime Drawing and Diagrams	1		3	3
E132	E-Mats	Engineering Materials	4	4		4
E141	Nav Arch	Naval Architecture	4	4	1	5
D131/E142	Mar Env	Protection of the Marine Environment	3	3		3
D151/E151	Eng 1	Study and Thinking Skills in English	3	3		3
D451/E152	Fil 1	Komunikasyon sa Akademikong Filipino	3	3		3
E161	Math 1E	College Algebra	3	3		3
E171	Nat Sci 1E	Physics	4	3	3	6
D191/E191	P.E. 1	Basic Swimming	2		2	2
		NSTP	(3)			(3)
		SEMESTER TOTAL	**27**	**23**	**9**	**32**

Second Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
E211	Thermo	Thermodynamics	Math 1	4	3	3	6
E212	Chem	Industrial Chemistry and Tribology		3	2	3	5
E221	Electro 1	Basic Electricity		4	3	3	6
E231	Mach 1	Hand and Measuring Tools		2	1	4	5
D251/E251	Eng 2	Writing in the Discipline	Eng 1	3	3		3
E261	Math 2E	Plane Trigonometry and Solid Mensuration		3	3		3
D381/E281	Soc Sci 2	Society and Culture with Family Planning, STD, HIV, and AIDS Prevention		3	3		3
D291/E291	P.E. 2	Advanced Swimming	P.E. 1	2		2	2
		NSTP		(3)			(3)
		SEMESTER TOTAL		**24**	**18**	**15**	**33**

Summer

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
	Safety 1	Basic Training (BT)					
		SAT, SDSD					

SECOND YEAR

Third Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
E311	PASGT	Propulsion Ancillary Systems and Gas Turbine	Thermo	3	2	3	5
E312	Aux Mach 1	Auxiliary Machinery 1		6	5	3	8
E321	Electro 2	Marine Electronics and Electrical Maintenance	Electro 1	5	4	3	7
E331	Mach 2	Machining Tools	Mach 1	2	1	4	5
E341	Eng 3E	Speech Communication with IMO SMCP	Eng 2	3	3		3
E361	Math 3E	Calculus and Analytic Geometry		3	3		3
D391/E391	P.E. 3	Dual Sports		2		2	2
		NSTP		(1.5)			(1.5)
		SEMESTER TOTAL		**24**	**18**	**15**	**33**

Fourth Semester

Ref. No.	Module	Descriptive Title	Co-Requisite	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
E411	E Watch	Engine Watchkeeping with Resource Management			3	3	1	4
E412	PPD	Power Plant Diesel	Auto 1	Thermo	5	4	3	7
E413	Aux Mach 2	Auxiliary Machinery 2	Aux Mach 1		5	4	3	7
E421	Auto 1	Basic Control Engineering		Electro 2	4	3	3	6
E422	Electro 3	Marine Electricity		Electro 2	5	4	3	7
E431	Mach 3	Gas and Electric Welding		Mach 1	2	1	4	5
		NSTP			(1.5)			(1.5)
		SEMESTER TOTAL			**24**	**19**	**17**	**36**

Summer

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
	Safety 2	PSCRB	Safety 1				

THIRD YEAR

Fifth Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
E511	Mech	Mechanics and Hydromechanics	Math 2	3	3		3
E512	PPS	Power Plant Steam		6	5	3	8
D652/E551	Fil 2	Pagbasa at Pagsulat Tungo sa Pananaliksik	Fil 1	3	3		3
D561/E561	Stat	Introduction to Statistics		2	2		2
D681/E581	Hum 1	World Culture and Geography		3	3		3
D682/E582	Hum 2	Ethics with Introduction to Logic		3	3		3
D181/E583	Soc Sci 1	Politics and Governance with Philippine Constitution		3	3		3
D471/E584	Soc Sci 3	General Psychology with Alcohol and Drug Prevention		3	3		3
D491/E591	P.E. 4	Team Sports		2		2	2
		NSTP		(1.5)			(1.5)
		SEMESTER TOTAL		**28**	**25**	**5**	**30**

Sixth Semester

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
E621	Auto 2	Marine Automation	Auto 1	4	3	3	6
D522/E622	IT	Computer Applications and Networking		3	2	3	5
E631	Maint	Maintenance and Repair	E-Mats	3	2	3	5
E641	Persman E	Leadership and Teamwork		3	3		3
D631/E642	Mar Law	Maritime Law		4	4		4
D651/E651	Eng 4	Research (Report Writing)	Eng 3	3	3		3
D581/E681	Rizal	The Life and Works of Dr. Jose Rizal		3	3		3
D683/E682	Soc Sci 4	Basic Economics with Taxation and Agrarian Reform		3	3		3
		NSTP		(1.5)			(1.5)
		SEMESTER TOTAL		**26**	**23**	**9**	**32**

Summer

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	LabHrs	Total Hrs
	Safety 2	MEFA	Safety 1				
		ATFF					

FOURTH YEAR

Ref. No.	Module	Descriptive Title	Pre-requisite	Units	Lec Hrs	Lab Hrs	Total Hrs
	Ship-board Training	1-year Seagoing Service, Documented in an Approved Onboard Training Record Book and Includes at Least Six (6) Months Engine Watchkeeping Duties		40			

Outcomes-based Assessment and Evaluation

- The knowledge and skills of students are being assessed and monitored through the conduct of course/learning outcomes, midterms and final examinations. The assessment covers both theoretical and practical requirements of courses, as applicable. For trainees, they are assessed on achieving the required standards of competence for the particular program in accordance with the methods and criteria in the Approved Training and Assessment Standards.
- Assessment standards are in accordance with STCW, MARINA, CHED, OPITO and other statutory requirements. The assessment tools are validated and reviewed by the trained and accredited assessors within the institution.
- Third class midshipmen or second year students are required to undertake the nationwide Maritime School Assessment Program (MSAP) to assess their competencies in Mathematics, English, and Technical subjects.
- The Center of Competency Assessment.(CCA) is in-charge of item analysis, data-banking and item writing to ensure the administration of valid and reliable periodical examination for all subjects. CCA is equipped with the Optical Mark Reader (OPR) which is used for checking test papers, item analysis and item banking.

Academic Progression

Midshipmen/women are promoted every semester after complying all academic and non-academic requirements for a given semester which qualifies him/her to enroll for the succeeding semester.

A midshipman/woman may be deferred or discontinued from his/her studies during any stage within an academic year due to temporary physical sickness or deficiency as certified by the Academy's physician and/or any doctor/hospital recognized by MAAP or due to any reason acceptable by the Academy. If a deferred midshipman/woman fails to report within the period of two years, he/she will be considered resigned or separated.

A midshipman/woman may be separated from MAAP when he/she severs ties with the Academy or vice-versa due to any reason except dismissal. A midshipman/woman, after due process, may be dishonorably discharged from the Academy due to gross violation of MAAP rules and regulations including failure in any academic course.

Academic Calendar

FIRST SEMESTER

Enrollment (June)
Convocation (June)
Visitation Day for Fourth Class (August)
Midterm Examination (August)
Visitation Day (August)
Final Examination (October)
Submission of Final Grade Reports (October)
Semestral Break
Supplementary Shipboard Training of First Class Cadets

SECOND SEMESTER

Enrollment (November)
Shipboard Familiarization of Fourth Class Cadets
Basic Training for Third Class Students
Graduation Day for Second Batch of Previous Graduating Class (December)
200th Nite Show of Graduating Class (December)
Christmas Break (December)
Midterm Examination (January)
Visitation Day of Fourth Class Students (February)
Valentine's Hop (February)
Recognition Day (March)
Final Examination (March)
Submission of Final Grade Reports (April)

SUMMER

Enrollment for Shipboard Training
Enrollment for Summer Classes
ASTC Schedule for SAT and SDSD, PSCRB and other relevant trainings
Reception of IOP/RAMP - Incoming Fourth Class Midshipmen/Women
Submission of Application for Graduation and Awards - Graduating Class
Graduation Week
Incorporation Rites of Incoming Fourth Class Midshipmen/women
Shipboard Familiarization of Third Class Midshipmen
Midterm and Final Examinations (May)

DOCUMENTATION ACTIVITIES

Distribution of Training Record Book (December)

Passport completion of requirements and processing (July - December)

NBI Clearance Processing (August - October)

Submission of SIRB Requirements (October)

SIRB Processing Period (November or December)

Submission of Certificate of Proficiency from NAC-Third Class Cadets (March)

CHED-CAV Processing Period of Third Class Cadets (April)

POEA-SRC Processing Period of Third Class Cadets (April)

Faculty Profile

General Education	No.	%	Maritime	No.	%
Doctoral	8	27%	MM/CE	17	27%
Doctoral (on-going)	3	16%	CM/2E	15	24%
Masters	19	63%	2M/3E	14	23%
Total	30	100%	OIC	16	26%
Overall	92		Total	62	100%

Note: maritime instructors with doctorate degree (1 - 2%); masters-8 (13%); on-going masters program - 1 (2%)

Shipboard training program

Midshipmen/women undergo 365 days aboard Sponsors' or Training Ships performing all duties required for 3M/4E. They are required to accomplish their ISF training logbook/cadet journals. MAAP is the only school in the country that operates its own training ship for cadets' familiarization and supplementary shipboard training.

ACADEMIC SUPPORT

In support to the MET programs, MAAP continually improves its academic, research, and information and communications facilities.

State-of-the-art Facilities



Laboratories and Simulators

MAAP has state-of-the-art facilities that include a Simulator Center with the most modern Full Mission Bridge Simulator on a Motion Platform and Full Mission Engine Room Simulator with Big View®, GMDSS laboratory, Computer Laboratory, ten (10) LabVolt training systems for Refrigeration and Airconditioning, Fluid Power, Electromechanical System (EMS), Automation, and Electrotech Laboratory; Firefighting Complex; Vessel Training Center consisting of an Integrated Bridge System, an Operating Control Room, two main engine and two (2) auxiliary engines; Language Laboratory, and other modern facilities.

MAAP has a 5,020 DWT dedicated training ship (T/S KFO) and pier facility. Also, the MAAP's Sea Survival Center at the pier consists of an enclosed lifeboat on a free fall Davit, Fast rescue Boat and Conventional lifeboat.

MAAP also has Chemical Product Tanker Simulator (CPTS), Seamanship Laboratory, Actual Oil and Chemical Tanker Simulator, Full Mission Cargo Handling Simulator (Oil, Chemical/Product, LNG, and LPG), and Dynamic Positioning (DP) Simulator.

Most of the equipment and facilities are grants from various shipping companies and international organizations.


















Information and communication technology

With the use of modern technology, MAAP was able to cope up with the increasing demand of internet and network usage of midshipmen, faculty, and staff. With a total of 525 computer units from Data Servers down to client workstations from laboratories, study rooms and offices, MAAP provided high-speed internet access through capable Internet Service Provider (ISP) with a total bandwidth of 38mbps and Gigabit network speed access. Also, the installation of 56 WiFi routers located at different hotspot areas provided additional access to mobile users which include faculty and midshipmen for research, computer based training courses, access to Learning Management System for E-Learning materials, and other academic purposes. Connections to the internet and the local network are controlled by Firewall System for network security and reliability. In addition, MAAP is also provided with 3G and 4G network services for network connectivity for laptops, mobile, and other gadgets for internet connection. MAAP has state of the art ISDN and VOIP lines for outgoing and incoming calls for both Manila and Bataan.

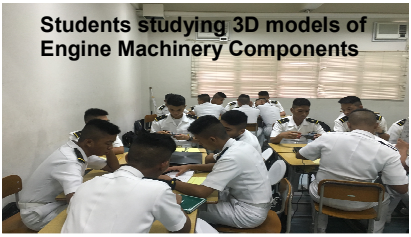
Library

MAAP Library has enhanced its services with 15,784 volumes of books (with 5,100 titles), an increase of 88% from 8,385 in 2002. The Library's collection also include e-books, e-journals, and other e-resources can be viewed at maaplibrary.wordpress.com. Computers are available for students especially for accessing electronic resources and internet for academic and research purposes.

Enhancement and Development Programs for students

Academic Ramp Program (ARP) was initiated based on the Warsash Maritime Center's study that recommends developing academic ramp in the form of model course (s) covering basic math, physics and other relevant subjects needed to take maritime training in accordance to STCW standards. Since 2006, MAAP extended its one-month refresher courses in Math and English to two-month ARP with additional course in Physics. This program is part of the admission requirements for incoming students conducted during the Indoctrination Orientation Period (IOP).

Instructional Materials and Curriculum Development Program raises academic standards as the academic courses are systematized and standardized in accordance with IMO standards and QMS Policy Manual. Course manuals and documents are being periodically evaluated and revised to conform to the current MET standards, including the Outcomes-Based Education (OBE) guidelines, for students' academic development.


Students studying 3D models of Engine Machinery Components

English Computerized Learning Program was acquired on November 21, 2005 in support for the MAAP English Only Policy to develop the communication skills of students in preparation for their employment onboard international vessels where English is the primary means of communication. This software involves 60-hour sessions of enhancing language skills and pronunciation capability. Pre and post tests are conducted to assess the performance of the students.

DNV Sea Skills Program, IT-Aided Competence Management Standard for Watchkeeping Engineer/Officer (WKE/WKO), is a maritime tool aimed to safeguard life, property and environment against the catastrophes and tragedies at sea as it used to anticipate and evade risks such as accidents most related to human error. This tool is used by midshipmen who are future officers to boost their "situational awareness" towards improved operational safety and competence.

Integrated Simulator Training Program– aims to make the students aware of their jobs onboard and be able to apply what they have learned. The simulator exercises intend to gauge the knowledge of the deck and engine cadets on the application of the theoretical information they have acquired in their respective academic instructions. This program is an additional service to students conducted beyond academic hours, apart from the curriculum, to enhance their knowledge and skills as they learn how to solve case scenarios.

Accommodation for Students

On-campus housing facilities

Midshipmen live inside the Academy and only leave the campus during school breaks, authorized shore leaves, and official business trips like participation in contests, conferences, parades, and other events. They are assigned to dorms where they are made responsible and accountable for the cleanliness and sanitation of their beds, lockers, and room, in general. Midshipmen observe regulations and daily routines that include proper attire, conduct and other activities. As MAAP midshipmen are in-house, they have more time for their academic and disciplinary training.

Campus safety and security

The Academy is an advocate of clean, safe, secure, and green environment as well a drug-free institution; hence, MAAP cadets are ensured of safety and security.

Caring for Students' Needs

Health-Related Programs were established at MAAP recognizing its essence to learning. Midshipmen learn better and faster under the most suitable medical and physiological conditions. Hence, MAAP with an Infirmary managed by five (5) physicians and four (4) nurses extend free medical services to the students and employees. Free annual medical checkup and health services are provided to faculty, staff and midshipmen as well as hospitalization at the AMOSUP Seamen's Hospital in Intramuros, Manila. Lecture on sexually transmitted diseases (STD) and health information drive campaign are being undertaken. All midshipmen are subjected to 3-doses of hepatitis B vaccination. Sponsors are therefore assured of healthy midshipmen on board their vessels.

Weight Control Program is initiated for overweight and underweight cadets through monitored proper diet and exercise. This is to ensure that they have the ideal physical health, body weight and tone, considering also that seafarers have a prescribed weight onboard the vessels.

Food services and berthing facilities are provided free to all MAAP students. Except for fourth class, midshipmen are allowed to buy snacks from Slop Chest being managed the alumni (ASMAAPI).

Guidance and Counseling Services are effectively implemented with the initiatives and professionalism of the Guidance and Counseling Office (GCO). The GCO has devised measures to enhance its programs that include counseling, testing, follow-ups, and information services. Apart from these major services, additional programs were developed such as exit interview as a feedback mechanism for continual improvement from student perspectives, sociometrics, and series of group processing. The sociometric device is used to identify leaders within a section, spot in-group cliques, and encourage self-assessment through analysis of their strengths and weaknesses. Further, the series of group processing, as part of the Annual Indoctrination/Orientation Period, include topics on stress, home sickness, personality development, and human relations.

Foster Parents Program. On July 19, 2004, the foster parent program was launched by the Guidance and Counseling Office (GCO) for midshipmen coming from far-flung provinces of the country especially from Visayas and Mindanao. This program provides these midshipmen with families who would support them in the absence of their biological parents especially during MAAP special events that require parents' attendance. Foster parents are reminded to treat their adopted children as foster sons/daughters and not as guests as MAAP cadets are trained to serve and not to be served. They are allowed to visit their foster children every shore leave or mass leave to spend time with them and vice versa.

Fleet's Valentines Hop is an annual program conducted very February that serves as venue for students to meet new friends, to practice appropriate social graces and to explore the virtues and norms set by cupid. Traditionally, this activity involves music, dancing and merriment for the cadets and their girlfriends or invited ladies from colleges and/or universities in Bataan.

Midshipmen Fleet governance and activities

Semi-regimented training

- Designed to instill values and discipline, develop character, and enhance leadership traits
- Midshipmen are organized into a regiment to develop leadership traits
- Seniority is observed among classes
- There is a **strict no hazing policy** because physical or verbal communication between the plebes and the upper classes is allowed only during formations and official activities.
- Upon graduation, midshipmen are commissioned as reservists with a rank of ENSIGN in the Philippine Navy.

MAAP Midshipmen Development Training

- As part of its total development program for its students, MAAP educates its students not only in terms of theoretical and technical aspects of deck and engine jobs but also with respect to character, values formation and leadership development for them to be competent and qualified to man the world fleet.
- Leadership is one of the key areas of student development in MAAP considering its relevance among marine officers in the exercise of their duties and responsibilities onboard international vessels.
- ***MAAP Leadership Development Scheme***, imbued with the academy's motto: "*Virtus, Fides, Disiplina*", provides an opportunity for cadets to experience rising from the ranks, likened to on-board situation or to any field of endeavor, while forming appropriate values, developing relevant characters and acquiring knowledge and skills necessary for their seafaring profession.
- In essence, a midshipman undergoes various stages of leadership development as: followership, role-modelship, and administrative. Each stage of development has a goal that must be achieved in order to say that a cadet has learned and has developed to become an ideal maritime leader, both professionally and socially.



Co-curricular and Extra-curricular Activities

MAAP fully supports over 30 organizations/clubs initiated, organized and established by the students themselves considering that these provides them with various learning opportunities to be developed holistically. Thru various value added extra-curricular activities, the students satisfy their social, emotional, spiritual and mental needs as well as enhance and showcase their talents, skills and abilities.

Co-curricular programs reinforce academic skills of students and develop their consciousness and sensitivity to civic and social responsibilities as well as their leadership and organizational skills.

Academic organizations consist of:

- *Kamaya Point Board Club* responsible for the official publication of the midshipmen fleet - the Kamaya Point.
- *English and speakers Board Club* promotes English proficiency and imposes midshipmen to use this language in accordance to MAAP regulations
- *Math and Sciences Club* composed of midshipmen dedicated to the academic proficiency and enhancement of the fleet by conducting extra-instructions to cadets with Academics deficiencies and by organizing the Annual Mind Strugglers quiz show
- *Camera Club* provides services in photo documenting all MAAP events and activities for publication, reporting and archiving
- *Computer and Gaming Club,* composed of computer wizards, assists in computer requirements during programs/activities
- *Dialectic Club* promotes development of skills and confidence of its members in acting, singing, and dancing and handles stage plays such as the Annual Frolics Night for 4th classmen and 200th Night show by graduating class
- *MAAP Arts and Crafts Club* promotes the artistic talents and skills of members by producing art designs and props for different activities
- *MAAP Technical Group* is responsible for the PA system, sound system and lightings during parades and other special activities
- *Women Cadets Club* aims to widen the knowledge of the midshipwomen on their job on-board; thus, preparing them for seafaring life on board.
- *MAAP Amateur Radio Club* aims to develop the technical communication skills of midshipmen thru various Amateur Radio activities.

Non-academic clubs include*:*

- *Athletic Club Council* governs all fleet squads/varsity teams and manages all sports activities by students and personnel in MAAP.
- *Body Building Club* trains and develops midshipmen physically for them to be better prepared for rigorous and strenuous work aboard ships
- *Mountaineering Club* enhances midshipman's knowledge and concern for mountain conservation with tree planting and river rehabilitations projects
- *Dance Troupe* enhances the talents and skills of students in dancing and singing that usually performs in various MAAP activities
- *Kamaya Choir* shares their talents and to serve God during Eucharistic celebrations and other functions
- *MAAP Band* renders entertainment during various social activities with members, able to hone their talents and skills in playing musical instruments.
- For spirituality of cadets, religious clubs are *Christian Fellowship Club* of Born Again Christians, *Liturgical Club* of Roman Catholics, *MAAP Baptist Club*, and *Youth for Christ*.
- *Etiquette and Protocol Committee* in charge of informing students of proper decorum during formal meetings and other activities
- *Peer Counseling Club* conducts annual seminar on peer counseling and emotional crisis management with students being taught different strategies in dealing with emotional problems, and proper counseling among their batch mates
- *Uniform Board Committee* that deliberates on the standards in the selection of materials, design and tailoring of standard uniforms.
- *Silent Drill Company*, composed of selected cadets, that perform during important occasions.
- *MAAP-Gig and the Amazing Sampaguita Foundation, Inc.* promotes its programs and advocacies such as spreading the importance of reading to children, all over the Philippines and even abroad.
- *MAAP Extension Service Club (MESC)* leads the students in engaging in extension and community outreach programs/activities.
- *MAAP Student Research Circle (MSRC)* are actively involved in research projects/activities, apart from the curriculum.

Sports and Recreation

Sports development programs involve annual intramurals for the students to enjoy and to develop leadership, teamwork, camaraderie and athletic skills through cheering and sports competitions. Moreover, MAAP also has annually engaged in a tri-academy athletic meet with PMA and PNPA as well as in the Universities and Colleges Athletic Associations of Bataan (UCAAB) meet. These activities develop friendship and sportsmanship, and widen students' horizon being expose to culture, values and practices of other institutions.

All fleet squads/varsity teams and sports activities managed by students and personnel in MAAP are governed by the Athletic Club Council consisting of various sports club of enthusiasts in badminton, sepak takraw, chess, soccer, volleyball, table tennis, darts, swimming, rugby, marathon, basketball, and others. MAAP garnered various awards in various sports competitions nationwide most especially in rugby where MAAP Rugby team even won international awards.

Community Involvement

Various extension services programs are participated in by MAAP cadets either voluntarily or as requested by external agencies. These include health, environmental care and protection, and education and training extension programs.

On Health Program, MAAP students assist in feeding programs, medical/dental missions and gift giving to indigent residents in Bataan. Biannually, MAAP midshipmen/personnel donate blood to the Philippine National Red Cross (PNRC) and Veterans Memorial Hospital and Medical Center (VMHMC) thereby helping save people's lives. Due to its contributions, MAAP received **Sandugo Tandang Sora, Gawad Papuri, and other awards** from various agencies such as PNRC, Department of Health and VMHMC. Also, MAAP annually collaborates with TOTAL and LIQUIGAZ for Christmas cheers to less fortunate children of Sitio Marina and other selected areas in Bataan by organizing fun games and giving meals and school supplies. On Environmental care and protection program, MAAP cadets conduct tree planting, coastal cleanup and waste management activities. MAAP, with all its cadets, annually supports the International Coastal Clean-up Day celebration every September in coordination with the local government of Bataan. MAAP cadets also take part in the Annual Brigada Escuela in the neighboring public schools by helping in cleaning and refurbishing their facilities.

6. MAAP TRAINING COURSES

The AMOSUP Training Center (ASTC) was established in 1972 at Manila. ASTC is one of the best equipped training centers in the country which is now co-located at MAAP.

MAAP-ASTC is an active member of the Philippine Association of Maritime Training Centers, Inc.

MARINA Accredited Training Courses

- Advanced Training in Fire Fighting (ATFF)
- Basic Liquefied Gas Tanker Cargo Operation Course (BLGTCOC)
- Basic Oil and Chemical Tanker Cargo Operations Course (BOCTCOC)
- Basic Training (BT)
- Basic Training Refresher (BT-R)
- Basic Training Updating (BT-U)
- Operational Use of Electronic Chart Display and Information System (ECDIS)
- Engine Room Simulator (ERS)
- Ratings Forming Part of Engine Watch (EWKC)
- Medical Emergency First Aid (MEFA)
- Ratings Forming Part of Navigational Watch (NWKC)
- Proficiency in Survival Craft and Rescue Boat (PSCRB)
- (Radar Navigation at Management Level) Radar, ARPA, Bridge Teamwork and Search and Rescue (RABSTR)
- (Radar Navigation at Operational Level) Radar Navigation, Radar Plotting and Use of ARPA (RNRPA)
- Radar Simulator Course (RSC)
- Ship Security Awareness Training and Seafarers with Designated Security Duties (SAT and SDSD)
- Ship Simulator and Bridge Teamwork (SSBT)
- New and Updating Management Level Courses (MLC) for deck and engine
- Updating Trainings for OIC of Navigational Watch (Part A)
- Updating Trainings for OIC of Engineering Watch

In-House Training Courses

- Anti-Piracy Awareness Training (APAT)
- Anti-Piracy Awareness Training with Simulator Exercise (APAT with SIMEX)
- Bridge Equipment Familiarization and Watchkeeping Course (BEFWKC)
- Cook's Course (CC)
- Chef's Upgrading Course (CUC)
- Electric Arc Welding and Cutting (EAWC)
- Engine Room Equipment Familiarization and Watchkeeping Course (EREFWKC)
- Familiarization in Davit-Launched Total Enclosed (FDLTEL)
- Fire Fighting (FF)
- Free-Fall Lifeboat Familiarization (FFLB)
- Free-Fall Lifeboat Coxswain (FFLC)
- Gas Welding (GW)
- Life Saving (CPR/AED) and Oxygen Administration (LSOA)
- Modified Basic Oil and Chemical Tanker Tanker Cargo Operations Course (MBOCTOC)
- Modified Operational Use of Electronic Chart Display and Information System (MECDIS)
- Modified Fire Prevention and Fire Fighting (MFF)
- Modified Elementary First Aid (MODEFA)
- Modified Personal Survival Techniques (MPST)
- Remotely Operated Vehicle (ROV)
- Special Advanced Fire Fighting (SFF)
- Special Modified Personal Survival Techniques (SMPST)

OPITO- Accredited Courses

- Basic Offshore Safety Induction and Emergency Training (BOSIET)
- Further Offshore Emergency Training (FOET)
- Helicopter Underwater Escape Training with Emergency Breathing System (HUET with EBS)

MAAP Simulator Center Courses

- Chemical and Product Tanker Simulator Course (CPTS)
- Advanced Tanker Cleaning Course (ATCC)
- Train the Simulator Trainer and Assessor (TSTA (IMO 6.10))

7. Graduate Programs - CENTER FOR ADVANCED MARITIME STUDIES (CAMS)

MAAP's Center for Advanced Maritime Studies (CAMS) was established to answer the growing demand for qualified and well-trained Marine office executives and Maritime educators. CAMS cater for the needs of the stakeholders by offering graduate programs and high level short courses/seminars for seafarers, research, and consultancy for the maritime industry.

CAMS is joint project of AMOSUP and the Seafarers' Promotion Fund managed by All Japan Seaman's Union (AJSU) and International Marine Managers Association of Japan (IMMAJ).

CAMS, as approved by the Commission on Higher Education (CHED), offers **Master of Science in Marine Transportation (MSMT) and Master of Science in Marine Engineering (MSMARE)**. These are the first vertically articulated maritime postgraduate programs in the Philippines; qualifying the candidates to the requirements of CHED CMO 40 in the pursuit of academic career as well as gain the qualification and competence of a Marine or Technical Superintendent as per DNV Standard 3.301.

Admission Requirements

1. Maritime Bachelors Degree Holder
2. Preferably Management Level
3. Endorsement from Sponsoring Companies

LIBRARY

STUDENTS' OFFICE

CLASSROOMS

1st graduates: Capt. Daniel S Torres (MSMT); C/E Patricio V Roque (MSME)

Family bungalow for CAMS Students

Curriculum

Master of Science in Marine Transportation	Master of Science in Marine Engineering	Credit Units
Maritime Law	Maritime Law	3
Health, Safety, Security and the Environment	Health, Safety, Security and the Environment	3
Corporate and Social Responsibility	Corporate and Social Responsibility	3
Ship Performance, Drydocking & Repairs	Ship Performance, Drydocking & Repairs	3
Project Management and Quality Assurance	Project Management and Quality Assurance	3
Budget and Cost Control	Budget and Cost Control	3
Certification and Surveys	Certification and Surveys	3
Chartering and Cargo Carriage	Hull, Machinery and Maintenance	3
Control of Operations and Nautical Equipment	Technical Equipment and Control System	3
Practicum/ Laboratory	Practicum/ Laboratory	3
Statistics	Statistics	3
Research Methodology	Research Methodology	3
Thesis	Thesis	6
Portfolio	Portfolio	
Seminar and Special Lectures	Seminar and Special Lectures	
	Total Units	42

8. PROFESSIONAL CAREER DEVELOPMENT CENTER (PCDC)

Professional Career Development Center (PCDC), being supported by AMOSUP includes the PRC computerized walk-in examination system (WES) which speeds up the certification and licensing process; hence, accelerating production of more officers. This PCDC serves as a computer training and review center for WES to encourage marine officers to upgrade their licenses. MOA between AMOSUP-MAAP and PRC was signed in July 2007 for the PCDC to also serve as an off-site WES testing center.

9. RESEARCH

IMEC 16 2004

AMETIAP 2005

ICERS8 2007

AMFUF 10, OCT. 2011

As an Institution of Higher Learning, MAAP is mandated to conduct relevant MET research programs for its institutional development including research activities to enhance the maritime education and training curricula. Researches has also been conducted in collaboration with other agencies or organizations in the maritime and education sector. MAAP motivates its faculty and staff to conduct research as well its students to develop their critical thinking and problem solving skills. The Academy provides incentives including an opportunity to present research papers in national and international conferences. MAAP has also hosted various national and international conferences such as the International Maritime English Conference (IMEC), International Maritime Lecturers Association (IMLA) Conference, International Conference for Engine Room Simulators (ICERS), Asia Maritime and Fisheries Universities Forum (AMFUF), and others which are actively participated in by MAAP students.

In 2004, the then Department of Research and Extension Services (DRES) formed the MAAP Research and Extension Services Circle (MRESC), composed of the top 10% of the each class, to assist and promote research and extension services amongst the students. For a more MET-focused research program, research responsibility was transferred to the Department of Academics - Research Unit in 2013.

10. EXTENSION SERVICES

MAAP conducts relevant extension service programs to improve the living conditions of the surrounding community thru transfer of appropriate technologies, values, attitudes, knowledge and skills that will ultimately advance the social practice or lives of clienteles, partners, and cooperators. Various programs on health and nutrition, environmental care and protection, livelihood, education and training, and other outreach programs are being implemented by the MAAP community (students/faculty/staff) either voluntarily or as requested by external agencies. In 2011, DRES (now ERO) established the PAEPI Junior Club, composed of volunteer students who are willing and able to share their time, talent and energy in participating, initiating, organizing and documenting various outreach programs for the community. This club is the only student organization at MAAP accredited by UNESCO. Also, the MAAP Extension Service Circle (MESC) was officially formed in 2013 with Extension service responsibility at MAAP being transferred to the Department of Academics - Extension Service Unit (AESU).

11. QUALITY ASSURANCE/ACCREDITATION

The MAAP Quality Management System (QMS), documented in the MAAP Quality Policy Manual, involves efficient and effective implementation and improvement of policies, processes, and programs relevant to maritime education and training services that meet customer, statutory, and regulatory requirements as influenced by the business environment including changes or risk associated and standards of STCW '78 as amended in 1995, 1997, and 2010, PNS ISO 9001:2015 Quality Management Systems, PSB 100:2002 Standards for Quality Maritime Education and Training, CHED Rules for a Quality Standards System (QSS) in Maritime Academies, MARINA, PACUCOA, PNS ISO 9004:2009 Managing for the Sustained Success of an Organization – A Quality Management Approach, Offshore Petroleum Industry Training Organization (OPITO), ISO 22000:2005 Food Safety Management System, DOLE-OSH, other IMO, DNV-GL and statutory and regulatory requirements. Currently, MAAP is working towards conformance to PACUCOA Level II accreditation.

MAAP QMS is being carried out under the supervision of the Quality Assurance Department led by a Quality Management Representative.

12. EXTERNAL RELATIONS/LINKAGES/AFFFILIATIONS

With the reorganization in 2014, MAAP established the **External Relations Office or ERO** (formerly Department of Research and Extension Services) to manage its linkages and partnership with various maritime and non-maritime institutions for academic, research, extension and professional development. The ERO pro-actively develops cooperative relationships with relevant contacts–maritime education and training officials, faculty members, facilitators, government officials and other stakeholders to maintain the Academy's reputation, while paving the way for future maritime partnerships and opportunities. External Activities at MAAP which are in partnership with external partners or linkages are carried out in accordance with the directives of MAAP President as well as current trends for innovative development. External activities and expansion of external contacts are important for an effective quality management system which allow meeting of excellent education standards. To enter the educational international market and arena, ERO carries out the following tasks: Development of cooperation with external organizations and educational establishment; Implementation of external educational, extension and research projects/programs; Organization of external international visits, internships; Business trips and conduct of

international seminars, conferences and other events in partnerships with external entities; Preparation of MOUs and MOAs and arrange signing either in MAAP or in any agreed venue; Hosting of local or international conferences, seminars–workshops and symposia; Submission of MAAP entries for awards/recognitions; and Preparation of proposed projects for funding. More details can be obtained from the MAAP External Relations Manual @ June 2016 with ISBN 978-971-94829-4-9.

12.1 MAAP International Affiliations/Linkages

1. ***Association of Marine Fisheries and University Forum (AMFUF),*** **South Korea** *(http://amfuf.kmou.ac.kr)*

   MAAP is an active AMFUF member together with 19 other **maritime universities in Asia Pacific Region since 2008** to date. MAAP hosted the 10th AMFUF conference in 2011.

2. ***Nautical Institute (NI), UK*** **(www.nautinst.org)**

   Since 2014 to date, MAAP President leads the NI Philippine branch with the ERO Director as its Secretary/Contact Person. First time in the NI history with a Filipino leading the branch in the Philippines and the conduct of a Manila Command Seminar in 2014.

3. ***International Marine Engineering and Science and Technology (IMarEST, UK) (www.imarest.org)***

   MAAP President leads the IMAREST Ph Branch (First time in the history of IMAREST with a Filipino leading the branch with its ERO Director as Secretary General /contact person in the Philippines.

4. ***International Association of Maritime Universities (IAMU), Japan (www.iamu-edu.org)***

   IAMU has **63 member institutions** worldwide represented by 34 countries. MAAP is an institutional member with MAAP President as head representative and its ERO Director as contact person. MAAP President delivered a keynote message for the **IAMU Conference,** held at the World Maritime University (WMU), Malmo, Sweden in October 2005.

5. ***GlobalMET, New Zealand (www.globalmet.org)***

   MAAP President sits in the Board as Vice-Chairman of GlobalMET with its ERO Director as contact person. MAAP hosted GlobalMET TKF professional development in 2014, 2015 and 2016.

6. Shipping Cluster

http://www.shippingcluster.com/company/maritime-academy-of-asia-and-the-pacific-maap and http://seafarertimes.com/2011-12/node/540

12.2 Other MAAP International Linkages

1. Academy of Maritime Education and Training (AMET) Chennai India (www.ametuniv.ac.in)

MAAP President as invited guest of honor and speaker in the 2016 IMO International Conference in April 2016 with theme "*Shipping Indispensable in the World"* which MAAP President appreciated in his letter to AMET VC Col Dr. Thiruvasagam dated March 21, 2016.

2. Australian Asia Research Educational foundation Inc (AAREF), Australia (www.aaref.com.au)

MAAP supports AAREF thru scholarly articles and other joint academic activities. (Please check ***www.aaref.com.au/en/about-aaref/sponsors-partners and www.auamii.com***)

3. American University of Sovereign Nations, Arizona USA (www.ausn.info)

MAAP signs MOU with AUSN on April 9, 2014 and supports its activities ***http://www.ausn.info/news/may_2014*** ***http://www.ausn.info/worldwide_collaboration***. ERO is a regular reviewer of AUSN graduate students thesis and dissertation.

4. Asian Educational Research Association (AERA) (www.aerassociation.com)

5. Asia Marine Educators Association (AMEA), Japan and Taiwan (www.saveoursea.social)

MAAP received invitation for networking in 2015 from the Dept of Marine Policy and Culture, Tokyo University of Marine Science and Technology and from National Taiwan Ocean University (NTOU).

6. Asia-Pacific Manning & Training Conference and ***Crew Connect and Global, UK*** (www.ifsma.org, www.maritime.knect365.com/crew-connect-global/agenda/2)

MAAP supported the invitation of Crew Connect, waiving its registration fee for the MAAP President as their invited speakers/ panelist in 2011, 2014 and 2015 at Sofitel Hotel and the ERO Director for its conference in 2009 and on November 15-16, 2016.

7. Baekryeong High School South Korea

MAAP signed MOA with Baekryong High School in August 2012. MAAP supported the invitation of BHS who sponsored travel of ERO Director as one of its guest of honor and motivational speakers.
http://www.academia.edu/11313633_/BHS_Korea_MOU_with_MAAP_PAEPI_and_other_Schools_Philipines_with_MAAP_as_host

8. ***Bit Conference, China (www.bitcongress.com)***

MAAP as sponsored and invited member of the Advisory Board, session chair, and presenter.

*Bit's 1st Annual World Congress on Ocean (**WCO2012**), Dalian China, September 20-22,2012*
*Bit's 1st Frontier industrial Forum (**FIN2013**), Qingdao China **"**Push Emerging Economy Forward," October 24-25, 2013*
*Bit's1st World Congress of Geophysics (**WCG2014**), Taiyuan China "Innovation, Discovery and Development," September 16-18, 2014*
*Bits' 4th World Ocean Congress (**WCO2015**), Dalian China "21st Century Maritime Silk Road," November 6-8,2015*
*Bit's 5th World Ocean Congress, Qingdao China (**WCO 2016**) **"**Innovation, Integration, Cooperation and Sustainability," November 4-6, 2016*

9. Chulalongkorn University, Thailand (www.chula.ac.th/en/)

MAAP supported the request invitation of Chulalongkorn University (2016 top Thai University in Asia) who sponsored travel of its ERO Director in February 2016 as one of their International Professors in the **Center for Ethics and Technology**. ERO Director presented the EEI -sponsored MAAP study entitled: "*Traditional and Health Practices of Indigenous People in the Philippines: Implications to Academic Discourse and MAAP Extension Services Program"* https://www.youtube.com/watch?v=2hMz_AG7Pxg *and* https://www.youtube.com/watch?v=8Q45kztUEYU

10. Eubios Ethics Institute, Thailand (www.eubios.info)

MAAP supported the request invitation of **EEI (**who sponsored travel of ERO Director as one of the speakers/lecturers/facilitators/scholars.

11. Far Eastern State Technical Fisheries University (FESTFU) Vladivostok Russia (www.univerzities.com/russia/far-eastern-state-technical-fisheries-university)

FESTFU is one of MAAP's co-AMFUF member. On June 26, 2016, FESTFU invited MAAP for its available students to join FESTFU sailing ship "STS *Pallada"* which MAAP President appreciated.

12. Gdynia Maritime University, Poland ***(www.transnav2015.am.gdynia.pl)***

MAAP supported the invitation of GMU Poland and **NI Poland Branch President/Chair Capt. Prof Dr. Adam Weintrit** for committee member/ speakers/panelist from MAAP. MAAP ERO Director is a member of International Program Council and Scientific Committee.

13. Graduate School, University of Tasmania, Australia **(www.utas.edu.au/research-admin/graduate-research)**

MAAP thru ERO supports the request of UTAS graduate schools for regular review of dissertation /studies of its students.

14. Incheon National Maritime High School

MAAP signed MOU on March 1, 2013 with Principal Kim; August 9, 2012 with Principal Yun and November 25, 2007 with Principal Kil Chang Nam. As per signed MOU, INM sent Korean scholar at MAAP in two separate instances and sponsored 6 MAAP scholars as pilot students in Korea for senior maritime high school (K-to-12 Program).

15. International Conference on Engine Room Simulators (ICERS) of International Maritime Lecturers Association (IMLA)

MAAP thru its MIITD Manager Engr. Gerardo Galang sits as member of the Steering Committee that assists with the general work and the promotion of the research interest amongst the ICERS community. **(www.imla.co/committees/icers.htm)**

16. International Maritime English Conference (IMEC) of IMLA

MAAP thru its MAAP Senior Lecturer Ms Jane Magallon sits as member of the IMEC Steering Committee that assists with the general work and in the promotion of the research interest amongst the IMEC community **(www.imla.co/imec)**

17. Innovative Compliance Europe Ltd. and Hochschule Wismar, University of Applied Sciences: Technology, Business and Design

MAAP supported the request invitation of Innovative Compliance who sponsored travel of ERO Director as one of their participants in Berlin Germany in July 2015 and appreciated the assistance in the final report to the European Commission ***http://ec.europa.eu/transport/modes/maritime/studies/doc/2015-10-implement-of-labour-supplying-resp-pursuant-to-mlc-report.pdf***

18. Knowledge, Innovation and Enterprise (KIE), UK ***(www.ijkie.org)***

KIE appreciated MAAP paper contribution with an award for best paper on Knowledge, Innovation and Enterprise ***http://www.kiecon.org/KIE2015Newsletter.pdf***

19. Korea Institute of Marine Fisheries and Technology (KIMFT), South Korea (www.seaman.or.kr/en)

MAAP signed MOU with KIMFT and sent **Mr. Edgar Sajor** to KIMFT Korea for their requested English Teacher. MAAP President was also invited at as GOH and speaker at **KIMFT by its Former President General Shin-Gil Kang.**

20. Korea Maritime Ocean University, South Korea

MAAP Philippines Thru its ERO Director represented Philippines in the SPIL Conference "*Shipping Ports International Logistics"* as speaker, session chair and professor in the KMOU graduate school in 2009.

21. Mississippi State University, USA http://radvanyi.ciss.msstate.edu/2007/bio-Santos.htm

MAAP President delivered his lecture on the topic: *Abu Sayaff and Its Capability to Threaten the Energy Sea-lanes"* in the Executive Lecture Forum as he was honored with the Radvanyi Chair in International Security Studies on October 2, 2007.

22. Mokpo National Maritime University (MNMU), South Korea *(Signed MOU in December 2015)* ***(www.mmu.ac.kr/G5)***

On May 22, 2016, MAAP sent three MAAP scholars (2 males and 1 female) to Mokpo for their 6-months Shipboard Training. On July 18, 2016, MNMU in cooperation with 4 Korean Shipping companies (Solpia Marine, FOSCON, PAROLA and Fair Shipping) sent 8 Korean BSMT exchange students (6 males and 2 females) at MAAP.

23. National Taiwan Ocean University (NTOU), Taiwan (http://english.ntou.edu.tw/bin/home.php)

MAAP supported the request invitation of NTOU who sponsored the travel of its ERO Director as their Keynote speaker and Guest of honor in November 2015. MAAP powerpoint presentation was uploaded by NTOU on their website ***http://tmec.ntou.edu.tw/ezfiles/31/1031/img/308/131291650.pdf***

24. Osaka University, Nakanoshima Center, Osaka, Japan for the NATECH 2016 Symposium **(http://www.naoe.eng.osaka-u.ac.jp/~kato/isub3-e.htm)**

MAAP supported the invitation of Osaka University who sponsored the travel of its ERO Director as one of their speakers and partners. MAAP powerpoint presentation uploaded by Osaka University. ***http://www.naoe.eng.osaka-u.ac.jp/~kato/fils/NATECH2016_Baylon_Osaka%20(1)%20(1).pdf***

MAAP as partner for the joint Intera-Natech: Inter Asian Initiative on Joint Natural and Technological Risk Reduction at Industrial Estates
www.med.osaka-u.ac.jp/eng/
List of Presentations ***http://www.naoe.eng.osaka-u.ac.jp/~kato/Presentation.htm***

25. **Partnerships in Environmental Management for the Seas of East Asia or PEMSEA (www.pemsea.org)**
MAAP contributed to the East Asian Congress in 2009 to date
(www.pemsea.org/eascongress/international-conference)

26. ***PIANC Think Climate Coalition, UK (www.pianc.org)***
MAAP supported the requests of PIANC.

27. ***Research Center for STCW, MOTC Taiwan***
MAAP signed MOA with MOTC on July 28, 2016 at MAAP Campus, Bataan. (http://en.motcmpb.gov.tw/)

28. **Seafarers International Research Center (SIRC), Cardiff University, UK. ISBN: 1-900174-28-6. (www.sirc.cf.ac.uk)**
MAAP is part of the joint computer-based training (CBT) research paper funded by the European Commission (2014-2016) with ERO Director as project leader for the Philippines. Full paper **http://www.sirc.cf.ac.uk/Uploads/In%20House/CBT%20Report.pdf**

29. ***STIE Perbanas Surabaya Indonesia*** (MOU signed in Nov 2010 and March 28,2015) (www.perbanas.ac.id/news)
MAAP supported the invitation of STIE Perbanas English Club who sponsored travel of its ERO Director as one of their resource speakers on March 28, 2015 ***https://twitter.com/djuwarisarkawi/status/549144383916744704***

30. ***Tanishsqa Quintessence Management Services, Mumbai India (www.tqmsglobal.com/businessconsulting).***
TQMS CEO Dr. Arora nominated MAAP in various international awards that were sponsored by various reputable sectors in Thailand, Singapore and India. MAAP won (out of his 9 nominees). MAAP President was awarded Exemplary Leadership Award and ERO Director with Women Super Achievers Award by CMO Asia's Educational Excellence in Pan Pacific Hotel Singapore.

31. ***Tennessee Technological University (TTU) Tennessee, USA***

In December 2014, MAAP signed an MOU with TTU in Manila, December 2014 (www.tntech.edu)

32. Tennessee Renewable Energy and Economic Development Council (TREEDC), Tennessee, USA (www.treedc.us)
MAAP is a partner of TREEDC and also had paved way for the partnership of other universities. MAAP shared its best practices on Renewable Energy uploaded in TREEDC website.

33. United Nations, Educational, Scientific and Cultural Organizations (UNESCO)
In April 2011, MAAP hosted the UNESCO accreditation of PAEPI Student Clubs cum First National PAEPI, PhilARM and PFUCCA Student Researchers and Awarding of Best Research and Extension Services.

34. UNSOED (Fakultas Kedokteran Universitas Jenderal Soedirman), Indonesia
MAAP supported the invitation of UNSOED who sponsored travel of its ERO Director as one of their International Professors
http://fk.unsoed.ac.id/en/content/2nd-intensive-bioethic-course-ibc-and-10th-international-youth-peace-ambassador-ypa

35. Warsash Maritime Academy of Southampton University (WMA, SU), UK
MAAP initiated and participated in the Post-graduate Certification Program (PGCERT) conducted by Professors of the Southampton University, that benefitted 40 maritime professionals with 10 from MAAP faculty/staff.

12.3 MAAP Local Linkages

1.* Association of Local Colleges and Universities in the Philippines (ALCU-COA) *(www.alcucoa.org.ph).
MAAP Thru its ERO Director serves as Senior ALCUCOA Accreditor and invited as accreditor of two local Colleges - University of Makati and University of Pasig on November 6 - 7, 2013.

***2 Bagong Bayani Foundation Inc* (www.bbfi.com.ph)**
MAAP President is one of the Board of Trustees.

3. Balsamo Outreach for Teaching and Learning (BALSAMO) (www.balsamooutreach.org)
MAAP sent its ERO Director in Sendai University, Japan as invited speaker on Human Security Issues on September 6-7 2014, as requested and sponsored by BALSAMO.

4. Bataan Coastal Care Foundation Inc (BCCFI) *(http://www.bataan.gov.ph/home/images/clsuzp/IBCBCCF.pdf)*
MAAP President is a member of the Board of Trustees.

On October 29, 2015, MAAP submitted the paper *"MAAP contributions to the Bataan State of the Coast from 2005-2015"* to BCCFI and PMO Bataan. *(www.pemsea.org)*

5. Bataan Christian High School (BCS) (www.bcs.edu.ph)
MAAP signed MOU for the K to 12 maritime high school.

6. Bataan Peninsula State University (BPSU) (www.bpsu.edu.ph)
MAAP signed MOU with BPSU in 2012.

7. Commission on Human Rights (CHR) http://198.23.173.74/chr/
MAAP, as a Center for Human Rights education, is an awardee of Best Practices on Human Rights education in 2008 by the Commission on Human Rights. MAAP contributed in the effort of CHR delivery of Human Rights services for them to innovate their operations and services in crafting their strategic plan for the succeeding years by participating in its evaluation/survey.

8. Commission on Higher Education (CHED) (www.ched.gov.ph)
MAAP was awarded best in student services program and physical facilities nationwide search. Several MAAP officers sit in the CHED Technical Panel for Maritime education.

9. Department of Education (DepEd), Philippines
MAAP submitted proposed senior maritime high school curriculum to DepEd (Output of MAAP partnership with Incheon National Maritime High School that sponsored 6 pilot students in Korea for the for the K to 12 program). MAAP President supports the DepEd and MARINA tie up on March 8, 2016.*http://www.deped.gov.ph/press-releases/deped-marina-tie-offer-maritime-program-shs*

10. Department of Energy (DOE), Philippines
DOE supported MAAP renewable energy development projects that include its project proposal presentations and MOA signing with TREEDC for renewable energy projects. MAAP thru its ERO Director received sponsorship for presentations on *"Ocean Energy and Other Renewable Energy Resources: Recent Development Updates in the Philippines* during the 2nd Annual World Congress of Ocean 2013 organized by Bit Congress @ Qingdao, China at Session 401: Frontier of Coastal and Ocean Engineering and Ocean Resource Development-Frontier Industrial Forum 2013.(http://www.bitconferences.com/fin2013/programcommittee.asp) With support from DOE and UP Diliman, she

presented 5 RE proposed projects for possible foreign funding during the project matchmaking session. These were published in the Book of International Table of Projects Reports which was handed by MAAP President to DOE and UP Diliman representative in February 2014 during the TREEDC MOA Signing activities in MAAP.

11. Library for Safe Seafaring (L4SS)

MAAP supported the request of Mariners/L4SS for the Live Streaming participated by MAAP faculty/staff and students and had recommended international speakers (IMAREST David Kelly, GlobalMET Capt. Richard Teo and NI Capt. Yashwant Chhabra) in their conference. MAAP President as the NI and IMAREST Ph President/Chair also provided a salutary message. ***http://www.safeseafaring.org/first-safe-seafaring-meet-held-in-manila-hosted-by-l4ss-e-library/***

12. Lyceum of the Philippines University/Lyceum International Maritime Academy (LPU-LIMA)

MAAP supported the LPU-LIMA requests with MAAP ERO Director as a Professorial Chair on MET (2013 to date).

13. Maritime Industry Authority (MARINA) (www.marina.gov.ph)

MARINA awarded MAAP President VAdm Santos with a **Timonel award for notable accomplishment** and contributions to MARINA and the Maritime Industry by raising the bar in academic excellence through sustained efforts in providing qualifies and competent marine officers and seafarers. ***http://marina.gov.ph/stcwoffice/marina-awards-timonel-for-2014/***

14. Masters and Mates Association of the Philippines (MAMAP)

http://www.shipboardtraining.com/mmap.php

MAMAP supported MAAP President Leadership as the NI PH Branch President/Chair.

15. Mindanao University of Science and Technology (MUST)– Graduate School College of Policy Studies, Education and Management (www.must.edu.ph)

MAAP supports the MUST graduate program with ERO Director as one of their regular reviewer of dissertation.

16. National Research Council of the Philippines/DOST (www.nrcp.dost.gov.ph)

MAAP President was awarded honorary member of NRCP in 2014, first time in the history of NRCP for a maritime President for his strategic leadership and exemplary management. NRCP funded two research projects (2012 and 2014). NRCP also funded two (2) outreach

activities of MAAP (2013 Action research and 2015 Livelihood project for Aeta Community). ERO Director chairs the International Studies Cluster and currently the Secretary elect of the NRCP Division 1 Educational, Governmental and International Studies (2016-2018).

17. Pamantasan ng Lungsod ng Pasig (PLP), Pasig City ***https://en.wikipedia.org/wiki/Pamantasan_ng_Lungsod_ng_Pasig***

MAAP and PLP signed a MOA on December 12, 2013. On its foundation day (April 13, 2014), PLP awarded the MAAP President with the *key to PLP and all appurtenant facilities owned and operated by the Pasig City* for his unconditional support and dedication to the development of the extension services program of the university. The key is the symbol of goodwill and cooperation between the two academic institutions.

18. Phi Lambdha Theta Honor Society (PLTHS) *of women educators*

MAAP supports PLTHS with its ERO Director as member/officer. MAAP participated in the PLTHS Annual Seminar–Workshop on Outcomes-based Education "*Designing Outcomes–Based Learning Plans Across Disciplines* in December 2015 in Manila. The ERO Director had promoted MAAP and its initiatives for OBE maritime curriculum in cooperation with GlobalMET.

19. Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA) ***(www.pacucoa.ph)***

MAAP is accredited by PACUCOA. Several of its officers are also PACUCOA accreditors and have sends its members to PACUCOA trainings and conventions.

20. Philippine Association of Extension Program implementers (PAEPI SEC CN 2009-1059) ***(http://paepi.webs.com)***

MAAP President serves as honorary Adviser and its ERO Director as PAEPI Chairman Emeritus (President for 2009-2014). MAAP has hosted various PAEPI activities and has published 6 PAEPI Journals.

21. Philippine Association of Maritime Institutions (PAMI) ***http://marina.gov.ph/stcwoffice/wp-content/uploads/2015/04/15-PAMI-BOT-OFFICERS-2015.pdf .***

MAAP is an active member of PAMI and supports its activities with its VP Felix Oca as PAMI President 2015-2016. MAAP was PAMI awardee for best Research and Research Practices in 2011 with the entry prepared and presented by ERO (formerly DRES).

22. Philippine Association of Maritime Training Centers (PAMTCI) ***http://associations.contactnumbersph.com/philippine-association-maritime-training-center/***

As an active PAMTCI member, MAAP supports its activities with its AVP on Training Capt. Diofonce Tuñacao as PAMTCI VP (2014-2016).

23. Philippine Association of Research Managers (PhilARM), UP Los Banos (www.philarm.webs.com)

MAAP is a PhilARM Lifetime Institutional Member and actively supports Philarm activities with its ERO Director recognized for its invaluable services as one of the members and officers (Auditor) of the PhilARM Board of Directors **http://philarm.webs.com/Past%20BOD%20and%20Officers.pdf**

24. Philippine Coast Guard (www.coastguard.gov.ph)

MAAP supports PCG trainings and other joint activities which are annually recognized and appreciated by PCG.

25. Philippine Military Association of Alumni Inc

http://www.thestandard.com.ph/news/-provinces/171248/pma-alumni-form-group-of-seniors.html. MAAP President is a member of the seven-man Advisory board of PMAAI

26. Philippine National Police (www.pnp.gov.ph). MAAP supports PNP trainings and other joint activities which are annually recognized and appreciated by PNP.

27. Philippine Navy (PN) (www.navy.mil.ph)

MAAP supports PN trainings and other joint activities which are annually recognized and appreciated by PN. All MAAP graduates are automatically granted an Ensign rank on their graduation. MAAP President was formerly PN's Flag Officer in Command.

28. Philippine Red Cross (PRC) (www.redcross.org.ph)

MAAP supports PRC through regular bloodletting by its community (faculty, staff and students). PRC Chair Richard Gordon and MAAP President VADM Eduardo Ma. R. Santos signed a memorandum of agreement (MOA) for the crewing and maintenance of M/V Susitna during the PRC's 31st Biennial National Convention (April 15, 2016).

29. Province of Bataan (www.1Bataan.com)

MAAP supports the Province of Bataan which are annually recognized and appreciated by the Province Governor and various offices like: PMO, PENR, PEO, etc. MAAP President is a member of the Board of Trustees in making the Province of Bataan a Town University.

30. System Plus College Foundation (SPCF) (www.spcf.edu.ph)
MAAP supports SPCF request and sent Prof/LCDR Angelica Baylon, PN (reserved) served as invited Guest of Honor and Speaker in the Change of Command/Graduation Ceremonies of Advance Officers and Basic SPCF ROTC Cadets SY 2012-2013.

31. United Nations Youth Association of the Philippines (UNYAP) and United Nations Association of the Philippines (UNYAP). MAAP supports UNAP and UNYAP and sends students to join various student contests who won in various student competitions**.** *http://unap1947unyap.blogspot.com/2009/07/10th-international-youth-day.html*

32. University of Asia and the Pacific (UAP), Pasig City
MAAP signed MOU with UAP President *http://crc.uap.asia/2014/03/11/uap-maap-sign-memorandum-of-understanding/*. MAAP actively participated in round-table discussions and forums hosted by UAP in Pasig with Theme: *Strengthening Maritime Education: Issues and Strategies* (June 18, 2014) and the *Theme: The Maritime Industry's Role in the Promotion of Integral Human Development* (March 10, 2014).

34. Women in Maritime Philippines (WIMAPHIL) *(www.wimaphil.org)*
MAAP approved and supported the request of WIMAPHIL with its ERO Director to serve as member of the Board of Trustees, elected as Secretary and now serving as one of the advisers . MAAP with cadettes and lady alumni actively assist WIMAPHIL in their various activities beneficial for woman seafarers.

12.4 EXTERNAL PUBLICATIONS

International Scientific Refereed Journals
⇒ *opportunity where MAAP faculty, staff and students may be publish their research works.*

1. Journal of Marine Technology and Environment (JMTE),
*Constanta Maritime University, Romania***.** ISSN1844-6166*(www2.cmu-edu.eu/en/)*

2. Journal of ETA Maritime Science (JEMS), *Union of Chambers of Turkish engineers and Architects and The Chamber of Marine Engineers, Istanbul Turkey.* ISSN-2147-2955 and e-ISSN 2148-9386

JEMS is published by UCTEA Chamber of Marine Engineers in Turkey, Dr Baylon of MAAP is executive editor from Philippines along with other 5 countries Turkey, Finland, Romania, UK and Greece. *(www.jembjournal.org)*

3. ***Journal of Knowledge, Innovation and Enterprise (JKIE),*** Philadelphia USA. *KIE is an affiliate of Society of World Education Fellowship International with KIE International Advisory and Review Board from 7 countries: Philippines, USA, UK, Netherlands, Australia, India and Jordan). http://kiecon.org/advisory-board/ and http://thyminesoft.com/kiecon/advisory-board/*

4. **International Association of Multi-disciplinary Research (IAMURE):** International Journal of Ecology and Conservation ISSN 2244-1573 and Online ISSN 2244-1581 *(www.iamure.com)*

5. **International Journal of Innovative Interdisciplinary Research or IJIIR (Australia Multicultural Interaction Institute)** ISSN-1839-9053 *(www.auamii.com)*

6. **International Journal of Transportation and Safety Navigation (TRANSNAV) Journal** *by Gdynia Maritime University, Poland)* ISSN 2083-6473/e-ISSN 2083-6481 *(www.transnav.eu)*

7. **Problem-Based Learning (PBL) in Maritime Education and Training (MET) Workshop Proceedings** Dokuz Eylul Publications with **ISBN 975-6981-63-6** MAAP as invited PBL workshop member had contributed three (3) papers published in the refereed journal *(http://www.deu.edu.tr/deuwebv2/en/).*

8. **Piracy, Maritime Terrorism and Securing the Malacca Straits** edited by Graham Gerard Ong-Webb Publisher Singapore [etc.]: ISEAS, Institute of Southeast Asian Studies [etc.] Year2006 Pages37-51. **ISBN981230391X, 9789812303912** Shelf mark406 F 45 Item Library number (ppn) 318746042. ***http://www.peacepalacelibrary.nl/plinklet/index.php?ppn=318746042***

PAEPI PUBLICATIONS, national publications prepared by ERO (DRES) (Supported by MAAP as value added outputs from 2009-2014)

1. PAEPI Biennial Publication 2009-2011 (ISSN 2094-7763) copyright May 2011
This publication documents the PAEPI initiatives. It is organized into 8 parts: PAEPI Convention Highlights; the PAEPI strategic planning outputs, PAEPI President Report to the general assembly; PAEPI membership; PAEPI policies and guidelines; PAEPI policy advocacy; PAEPI membership and Convention result with complements/ads from PAEPI supporters.

2. Publication of research based extension papers presented by extension services workers nationwide from 2009-2014:

1. **PAEPI Extension Journal on Infrastructure/Technology Development** (ISSN 2362-6577)
2. **PAEPI Extension Journal on Environmental Education** (ISSN 2362 6585)
3. **PAEPI Extension Journal on Socio-economic Development** (ISSN 2362-6569)
4. **PAEPI Extension Journal on Socio-welfare Development** (ISSN 2350-8493)

13. AWARDS AND RECOGNITION

MAAP is recipient of various international, national and regional awards/recognitions/citations and commendations for its Research and Extension Services Programs, MET Practices, Human Rights practices, Physical facilities, Student Services programs, Leadership, MET, Research, Extension Services and MAAP community (officials, Faculty, staff and Students). The awards and commendations received were granted by reputable **national organizations** such as: MARINA, NRCP, CHED, CHR, PAMI, PAMTCI, NFCHRE, PAEPI, UNAP, PhilARM, PAIR, Philippine Navy, Philippine Coast Guard, BCCFI, PMO, PPA, DOST, DOE, DedEd, WIMAPHIL and **international organizations**: IAMURE, IMLA, ICERS, IMEC,AMFUF, IAMU, KIE, NI, IMAREST, BITConference, GlobalMET, UNESCO, TRANSNAV, JMET, JEMS, AMEA, AAEF, AUSN, MOTC, MNMU, NTOU, AMET, KMOU, FESTFU, SPIL among others. These recognitions speak highly of the various initiatives and efforts done which are aimed at enhancing the curriculum, facilities, services and linkages for the total development of its students, faculty and staff.

14. SPONSORS

Aside from the support received from AMOSUP, MAAP receives sponsorship of its midshipmen/women from over 40 various shipping companies.

15. ALUMNI ASSOCIATION

The **Alumni Society of MAAP, Inc. (ASMAAPI)** was organized by MAAP graduates under the advisorship of the MAAP President with a mission/vision of unity, guidance and progress. They have established a Facebook Page designed for networking, sharing of on-board and personal experiences including involvement in various MAAP activities. Alumni whereabouts in terms of ranks, licenses, and companies are monitored by the Alumni Office located at MAAP headed by the Alumni Officer.

Alumni has been active in providing services to the Academy as instructors, facilitators and assessors. The Alumni Working in MAAP (AWIM), comprising of 60% of the maritime professionals and officers in the Academy, continue to inspire the midshipmen, share their expertise and experiences on board commercial and merchant ships. As instructors, they provide technical knowledge among cadets and as Alumni, they continue giving advises and guidance to the midshipmen on how to surpass the training and education as they were once midshipmen in MAAP. AWIM is part the various departments and divisions in MAAP such as the Department of Academics, MAAP Simulator Center (MSC), Center for Competency and Assessments (CCA), Vessel Training Center (VTC), Department of Shipboard Training (DST), and AMOSUP Seamen's Training Center (ASTC) where their services are needed for the continuous excellence of maritime education and training.

For the shipping industry, apart from their service as maritime officers, MAAP Alumni are also working with various shipping companies as crew officers and marine and technical superintendents. Also, ASMAAPI has been conducting various community outreach activities as well as services and/assistance on matters relating to wedding ceremonies, funeral vigils, medical needs and others.

16. MAAP HYMN

CRADLE OF DESTINY

Thou stand in the land of courage
In the midst of our bravest edge
To shine as a star and light the path
Towards the horizons of our dreams

As the drums beats sailors march on
Eyes front to face the raging storm
To answer the call of Thy Father's vision
To serve our country gloriously

Oh Alma Mater we reckon Thee soaring high
Thy name would glare even on an overcast sky
Cradle of our destiny
Molding us to be farers of the seven seas

Dignity and honor
in the fleet's heart and soul
Virtus, Fides et Disiplina is thy goal
No shoal can run Thee aground,
no storm will prevail
Competence, loyalty and discipline,
reigns Thy way
MAAP for Thee, we'll sail to the sea
Keep everything we learned from Thee
Though how far we wander and roam
To thee wind blows, to speed us home.

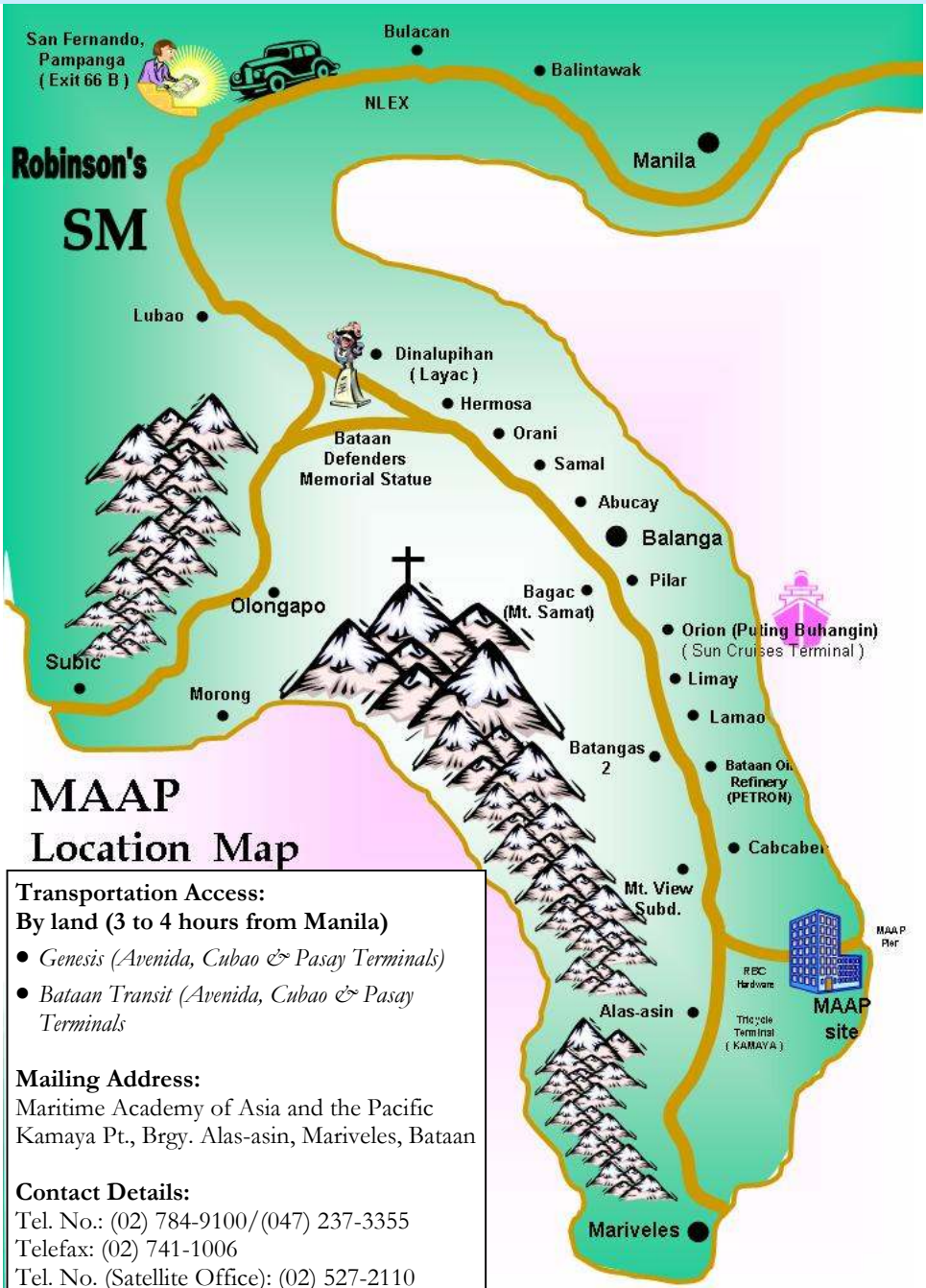
Capt. Leo Anthony G. Puylong '03
Capt. Jasmin C. Labarda '03

17. MAAP OFFICIALS

AMOSUP President/MAAP Chairman:	Dr. Conrad F. Oca
MAAP President/AMOSUP Exec.VP:	*VADM Eduardo Ma R Santos, AFP (Ret)*
Quality Management Representative:	*Mr. Michael A. Amon, MEM*
Director, External Relations Office:	*Prof. Angelica M. Baylon, PhD*
Finance Manager:	*Ms. Maristela O. Raquel*
Board of Admission (BOA) Chair:	*Capt. Gerlo L Elchico, PN (Ret)*
Vice President:	*Engr. Felix M. Oca , MEM*
Director, Center for Competency Assessment:	*Capt. Daniel S. Torres, Jr*
Manager, Management Information and Instructional Technology Development:	*Engr. Gerardo Ramon S. Galang*
Officer-In-Charge, Registrar's Office:	*Ms. Jo Ann N. Isaac*
HR Manager:	*Ms. Arlene M. Sta. Cruz*
Asst. Vice President for Academics:	*Dr. Leogenes L. Lee*
Dean of Academics:	*C/M Renante A. Garcia*
Research Coordinator:	*Ms. Ma. Celeste Orbe*
Extension Coordinator:	*Ms. Cornelia B. Wico*
Director, MAAP Simulator Center:	*C/E Alfredo M. Firme*
Director, Dept. of Shipboard Training:	*C/E Cleto Del M. Rosario*
Director, Continuing Education Center and Vessel Training Center:	*C/E Jesus V. Mendoza*
Director, Dept. of Midshipman Affairs:	*Capt. Gerlo L Elchico, PN (Ret)*
Head Librarian:	*Ms. Sheryl M. Reyes*
Asst. Vice President for Administration and Support:	*Capt. Gerlo L Elchico, PNRet)*
Preventive Maintenance and General Services	*Engr. Reynaldo Creencia*
Food Service Division	*Ms. Maiyhen Dela Rosa*
Procurement Office	*Ms. Ginalyn Batuto*
Accommodation and Lodging Office	*Mr. Mark Perez*
Asst. Vice President for Training:	*Capt. Diofonce F. Tuñacao,PN(Ret)*
Asst. Vice President for Graduate Programs:	*C/E Rodolfo D. Paiso*

18. VICINITY MAP

19. MAAP LOCATION MAP AND CONTACT DETAILS



Transportation Access:
By land (3 to 4 hours from Manila)

- *Genesis (Avenida, Cubao & Pasay Terminals)*
- *Bataan Transit (Avenida, Cubao & Pasay Terminals*

Mailing Address:
Maritime Academy of Asia and the Pacific
Kamaya Pt., Brgy. Alas-asin, Mariveles, Bataan

Contact Details:
Tel. No.: (02) 784-9100/(047) 237-3355
Telefax: (02) 741-1006
Tel. No. (Satellite Office): (02) 527-2110
Website: www.maap.edu.ph