

Curriculum Map for Bachelor of Science in Marine Engineering (BSMarE)

Code	Program Outcomes	Courses				Capstone
		Foundation	Introductory	Enabling	Demonstrative	
Section 10.1: Common to all Programs in all Types of HEI (PO-A)						
PO-A.1.	Engage in lifelong learning and understanding to keep abreast of the developments in Maritime practice;	NGEC Courses	ICT MarLaw	ICT MarLaw MainProp 1 EWK 2	-	<p><i>Note: The MHEIs shall develop their activities/requirements to meet the program outcomes of the course. The following are examples:</i></p> <ol style="list-style-type: none"> 1. 24-hour scenario 2. Academic paper 3. Engine room watchkeeping
PO-A.2.	Communicate orally and in writing using both English and Filipino;	NGEC 5	EWK 1	ICT EWK 1	All courses	
PO-A.3.	Work independently and in multi-disciplinary and multi-cultural teams;	NGEC 3 NGEC 8 NGEC 10 NGEC 11	EWK 1 MGMT	EWK 1 MGMT	EWK 2 MGMT	
PO-A.4.	Act in recognition and practice of professional, social, and ethical accountability and responsibility; and	-	MarLaw EWK 2 NGEC 8 NGEC 10	MarLaw EWK 2 NGEC 8 NGEC 10	MarLaw EWK 2 NGEC 8 NGEC 10	
PO-A.5.	Preserve and promote "Filipino historical and cultural heritage".	-	RIZAL NGEC 2	RIZAL NGEC 2	RIZAL NGEC 2	
Section 10.2: Common to the BSMT and BSMarE Programs (PO-B)						
PO-B.1.	Apply knowledge in mathematics, science and technology in solving problems related to the profession and the workplace;	NGEC 4 NGEC 7 NGEC 9	Thermo Mech IChem	Thermo Mech IChem	-	<p><i>Note: The MHEIs shall develop their activities/requirements to meet the program outcomes of the course. The following</i></p>
PO-B.2.	Evaluate the impact and implications of various contemporary issues in the global and social context of the profession	-	NGEC 2	NGEC 2	NGEC 2	

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			NGEC 3 NGEC 5 NGEC 8 NGEC 10	NGEC 3 NGEC 5 NGEC 8 NGEC 10	NGEC 3 NGEC 5 NGEC 8 NGEC 10	<i>are examples:</i> 1. 24-hour scenario 2. Academic paper 3. Engine room watchkeeping
PO-B.3.	Use appropriate techniques, skills and modern tools in the practice of the profession in order to remain globally competitive	NGEC 9	Thermo Mech IChem EMat	MainProp 1 ICT	EWK 2	
PO-B.4.	Conduct research using appropriate research methodologies	NGEC 5 NGEC 9	NGEC 2 NGEC 3 NGEC 5 NGEC 7	NGEC 2 NGEC 3 NGEC 5 NGEC 7	NGEC 2 NGEC 3 NGEC 5 NGEC 7	
Section 10.2: Common to both Programs based on Function under STCW II/1 and III/1 (PO-C)						
PO-C.1	Ensure compliance with pollution prevention requirements	-	Mar Law	Mar Law	-	<i>Note: The MHEIs shall develop their activities/requirements to meet the program outcomes of the course. The following are examples:</i> 1. 24-hour scenario 2. Academic paper 3. Engine room watchkeeping
PO-C.2	Maintain seaworthiness of the ship	-	NGEC 9 Mech IChem	Ship Con EWK 1 Maint	-	
PO-C.3	Prevent, control and fight fires onboard	-	-	-	AFF	
PO-C.4	Operate life – saving appliances	-	-	-	PSCRB	
PO-C.5	Apply medical first aid on board ship	-	-	-	MEFA	
PO-C.6	Monitor compliance with legislative requirements	-	MarLaw	Mar Law	-	
PO-C.7	Application of leadership and teamwork skills	-	MGMT	MGMT	MGMT	
PO-C.8	Contribute to the safety of personnel and ship	-	-	-	BT	

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Section 10.3.1: Specific to the BSMarE Program under STCW Code III/1 (PO-E)						
PO-E.1.	Maintain a safe engineering watch	NGEC 9 MDraw Thermo Mech IChem E Mat	Aux Mach 1- Lec Aux Mach 2- Lec Aux Mach 3- Lec Main Prop 1 Mar Law	Electro 1 Electro 2 Electro 3 Aux Mach 1- Lab Aux Mach 2- Lab Aux Mach 3- Lab Auto 1 Auto 2 Main Prop 2	EWK 1 EWK 2	<p><i>Note: The MHEIs shall develop their activities/requirements to meet the program outcomes of the course. The following are examples:</i></p> <ol style="list-style-type: none"> 1. 24-hour scenario 2. Academic paper 3. Engine room watchkeeping
PO-E.2.	Use English in written and oral form	NGEC 5	EWK 1	ICT EWK 1	MGMT EWK 2	
PO-E.3.	Use internal communication systems	NGEC 5	ICT	ICT EWK	EWK 2 MGMT	
PO-E.4.	Operate main and auxiliary machineries and associated control systems	NGEC 9 MDraw Thermo Mech IChem E Mat	Electro 1 Electro 2 Electro 3 Auto 1 Auto 2	Aux Mach 1- Lec Aux Mach 2- Lec Aux Mach 3- Lec Electro 1 Electro 2 Electro 3 Auto 1 Auto 2 MainProp 1	Aux Mach 1-Lab Aux Mach 2-Lab Aux Mach 3-Lab Main Prop 2	<p><i>Note: The MHEIs shall develop their activities/requirements to meet the program outcomes of the</i></p>
PO-E.5.	Operate fuel, lubrication, ballast, and other pumping systems and associated control systems	NGEC 9 MDraw Thermo Mech	Electro 1 Electro 2 Electro 3 Auto 1	Aux Mach 1- Lec Aux Mach 2- Lec	Aux Mach 1-Lab Aux Mach 2-Lab Main Prop 2	

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		IChem E Mat	Auto 2	Electro 1 Electro 2 Electro 3 Auto 1 Auto 2 Main Prop 1		<i>course. The following are examples:</i> <ol style="list-style-type: none"> 1. 24-hour scenario 2. Academic paper 3. Engine room watchkeeping
PO-E.6.	Operate electrical, electronic, and control systems	NGEC 9	Electro 1 Electro 2	Electro 1 Electro 2 Electro 3 Auto 1 Auto 2	Electro 3 Auto 1 Auto 2	
PO-E.7.	Maintenance and repair of the electrical, electronic equipment and control system	NGEC 9	Electro 1 Electro 2 Auto 1 Auto 2	ICT Electro 1 Electro 2 Electro 3 Auto 1 Auto 2	Electro 3 Auto 1 Auto 2	
PO-E.8.	Appropriate use of hand tools, machine tools, and measuring instruments for fabrication and repair onboard	-	ICT NGEC 9 Thermo Mech IChem	ICT MDraw EMat Mach 1	Mach 2 Mach 3 Maint	
PO-E.9.	Maintenance and repair of shipboard machinery and equipment	-	NGEC 9 Thermo Mech IChem	MDraw E Mat Mach 1	Mach 2 Mach 3 Maint	

Section 10.4 Common to the horizontal type as defined in CMO No. 46 s.2012

Note:

1. The Program Outcomes and its corresponding courses under Section 10.4 are to be determined by the respective Maritime Higher Education Institutions (MHEIs) based on their horizontal typology.
2. The MHEIs shall develop activities/requirements under capstone as deemed necessary to meet the program outcomes of the course.

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