

**SKILLS FRAMEWORK FOR SEA TRANSPORT
SKILLS MAP - 3rd/4th/5th ENGINEER**

Sector	Sea Transport			
Track	Shipping			
Occupation	Marine Engineer Officer			
Job Role	3rd/4th/5th Engineer			
Job Role Description	The 3rd/4th/5th Engineer acts as an Engine Watch Officer in a manned engine-room or as designated duty engineer in a periodically unmanned engine-room of ships powered by main propulsion machinery of 750 kW or more. He/She oversees the operation, maintenance and repairs of the engine-rooms and is responsible for the maintenance of the ship's safety and emergency equipment. He is an organised person who is able to multi-task at times and is cognisant of the regulatory requirements of manning engine-rooms. The 3rd/4th/5th Engineer must pass a colour vision test and must fulfil the requirements stipulated in the Standards of Training, Certification and Watchkeeping for Seafarers (STCW) issued by the International Maritime Organisation (IMO).			
Critical Work Functions, Key Tasks and Performance Expectations	Critical Work Functions	Control the operation of the ship and care for persons on board	Ensure compliance with pollution-prevention requirements	Performance Expectations (For legislated/regulated occupations) In accordance with: • Standards of Training, Certification and Watchkeeping for Seafarers (STCW)
			Prevent, control and fight fires on board	
			Operate life-saving equipment and apply medical first aid on board ships	
			Monitor compliance with legislative requirements	
			Contribute to the safety and security of personnel and the ship	
	Execute maintenance and repairs	Carry out fabrication and repair on board ships		
		Maintain and repair shipboard machinery and equipment		
	Execute electrical, electronic and control engineering operations	Operate main and auxiliary machinery and associated control systems		
		Maintain and repair electrical and electronic equipment		
	Execute marine engineering operations	Maintain a safe engineering watch		
Operate fuel, lubrication, ballast and other pumping systems and associated control systems				
Skills and Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Cyber Security	Level 3	Communication	Intermediate
	Electrical, Electronic and Control Engineering	Level 3	Decision Making	Basic
	Fire Prevention and Fire-fighting	Level 3	Global Mindset	Basic
	Maintenance and Repair	Level 3	Interpersonal Skills	Intermediate
	Personal Survival Techniques	Level 1	Managing Diversity	Basic
	Propulsion, Plant and Machinery	Level 3		
	Ship Medical Care	Level 1		
	Ship Seaworthiness and Pollution Prevention	Level 3		
	Ship Security	Level 3		
Survival Craft and Rescue Boats	Level 1			
Programme Listing	For a list of Training Programmes available for the Sea Transport sector, please visit: www.skillsfuture.sg/skills-framework/sea-transport			

The information contained in this document serves as a guide.