

SKILLS FRAMEWORK FOR PUBLIC TRANSPORT SKILLS MAP - ENGINEER				
Sector	Public Transport			
Track	Bus Fleet Engineering			
Sub-Track	Bus Engineering			
Occupation	Automotive Engineer			
Job Role	Engineer			
Job Role Description	<p>The Engineer monitors the performance of the bus fleet to ensure operational safety and reliability, as well as to identify bus system degradation, diagnose root causes and implement mitigation actions to reduce service downtime. He/She guides the bus maintenance team with technical advice based on his/her in-depth knowledge of a bus systems and engineering principles. He also conducts engineering studies to continuously improve bus operations and maintenance regime through implementing best practices in maintenance management as well as sourcing and application of technological aids to enhance bus performances.</p> <p>He is innovative, technologically savvy and possesses strong analytical skills to advance in his field of expertise. He is resourceful and has good project management skills to implement fleet-wide engineering studies and implementation of new technology applications for enhancement of fleet performance and maintenance regime.</p>			
Critical Work Functions and Key Tasks	Critical Work Functions	Maintain bus fleet	Key Tasks	
			Monitor bus performance for safety and reliability operations	
			Perform diagnostic analysis to identify complex, systemic and/or recurring faults of bus systems	
			Develop fault rectification methods to implement repairs for corrective and preventive maintenance measures	
	Support maintenance activities and operational requirements	Support continuous improvement activities to enhance service standards	Develop engineering specifications and cost estimates for bus design modifications	
			Provide technical advice for fleet maintenance activities according to established work processes and methods	
			Operationalise workshop activities in accordance to Original Equipment Manufacturer (OEM) instructions and organisational requirements	
			Prepare workshop maintenance and productivity reports	
			Manage contractors and internal maintenance functions to ensure safety requirements, operating standards and quality standards are adhered to	
	Manage people and team performance	Manage people and team performance	Ensure adherence with Workplace Safety and Health (WSH) policies, procedures and regulations when carrying out work	
			Conduct engineering studies to improve reliability of bus fleet and efficiency of fleet maintenance regime	
			Recommend workflow improvements to enhance the reliability and efficiency of fleet maintenance regime	
	Skills & Competencies	Technical Skills & Competencies		Generic Skills & Competencies (Top 5)
Bus Air-Conditioning Systems Maintenance		Level 4	Communication	Intermediate
Bus Brake Systems Maintenance		Level 4	Problem Solving	Intermediate
Bus Drivetrain Systems Maintenance		Level 4	Decision Making	Intermediate
Bus Electrical and Electronic Systems Maintenance		Level 4	Creative Thinking	Intermediate
Bus Engine System Maintenance		Level 4	Computational Thinking	Intermediate
Bus Regulatory Compliance		Level 4		
Bus Steering and Suspension Systems Maintenance		Level 4		
Change Management		Level 4		
Condition-based Assets Monitoring Management		Level 3		
Continuous Improvement Management		Level 4		
Data and Statistical Analytics		Level 4		
Engineering Maintenance Management		Level 4		
Innovation Management		Level 4		
Internet of Things Application		Level 3		
Inventory Management		Level 3		
People Development		Level 4		
Project Management		Level 4		

	Robotics and Automation Application	Level 3	
	Staff Performance Management	Level 3	
	Systems Engineering Thinking	Level 4	
	Technology Application	Level 2	
	Vendor Management	Level 3	
	Work at Heights	Level 3	
	Workplace Facilities Safety Management	Level 3	
	Workplace Safety and Health Culture Development	Level 4	
	Workplace Safety and Health for Incident and Accident Investigation	Level 3	
Programme Listing	For a list of Training Programmes available for the Public Transport sector, please visit: www.skillsfuture.sg/skills-framework/public-transport		

The information contained in this document serves as a guide.