

SKILLS FRAMEWORK FOR PUBLIC TRANSPORT SKILLS MAP - SENIOR ENGINEER/ENGINEER (MECHANICAL AND ELECTRICAL)					
<b>Sector</b>	Public Transport				
<b>Track</b>	Rail Engineering				
<b>Sub-Track</b>	Mechanical and Electrical				
<b>Occupation</b>	Rail Engineer				
<b>Job Role</b>	<b>Senior Engineer/Engineer (Mechanical and Electrical)</b>				
<b>Job Role Description</b>	<p>The Senior Engineer/Engineer (Mechanical and Electrical) leads multiple teams in performing preventive and corrective maintenance for mechanical and electrical systems. He/She is required to provide innovative recommendations to support organisational continuous improvement plans as well as re-prioritise work activities and address maintenance needs. He is also involved in the engagement and management of external contractors and ensuring the achievement of operating standards and quality standards.</p> <p>He is required to work in shifts and carries out his duties at various rail premises such as workshops and at train stations. He is well-versed in mechanical and electrical principles and adopts a methodical approach in resolving engineering challenges. He is a team player with good interpersonal skills and is able to demonstrate strong supervisory and leadership skills in implementing work processes and systems to meet operations and maintenance requirements.</p>				
<b>Critical Work Functions and Key Tasks</b>	<b>Critical Work Functions</b>	Maintain mechanical and electrical systems	Key Tasks		
			Manage mechanical and electrical systems preventive maintenance work carried out across multiple teams		
			Manage mechanical and electrical systems corrective maintenance work carried out across multiple teams		
	Support maintenance activities and operational requirements	Supervise complex fault analysis and testing of mechanical and electrical systems	Define procurement specifications for the sourcing of vendors		
		Manage contractors and stakeholders external to the mechanical and electrical team to ensure safety requirements, operating standards and quality standards are met	Manage the condition and quantity of supplies required for maintenance activities at work base		
		Endorse inspection and maintenance documents for work closure	Ensure workplace adherence to Workplace Safety and Health (WSH) policies, procedures and regulations when carrying out work		
		Ensure workplace adherence with the Rapid Transit System (RTS) Codes of Practice	Evaluate recommendations on workflow improvements to enhance the reliability and efficiency of mechanical and electrical systems		
		Support continuous improvement activities to enhance service reliability	Support the implementation of engineering initiatives to enhance the reliability and efficiency of mechanical and electrical systems		
		Conduct engineering studies to improve reliability and efficiency of mechanical and electrical systems	Manage people and team performance		
	Manage people and team performance	Re-prioritise work activities and manpower allocation to address deviation from planned maintenance schedule	Identify team's training needs		
		Track section's expenditure to assist in the forecasting of annual budget	Manage section's performance in achieving Key Performance Indicators (KPIs)		
		<b>Technical Skills &amp; Competencies</b>		<b>Generic Skills &amp; Competencies (Top 5)</b>	
		Asset Management	Level 4	Communication	Advanced
	Budgeting	Level 3	Problem Solving	Intermediate	
	Change Management	Level 4	Leadership	Intermediate	
	Condition-based Assets Monitoring Management	Level 3	Decision Making	Intermediate	
Continuous Improvement Management	Level 4	Resource Management	Intermediate		
Data and Statistical Analytics	Level 4				
Drainage, Plumbing and Sanitary Systems Maintenance	Level 4				
Equipment Maintenance and Housekeeping	Level 3				
Escalator and Travellator Maintenance	Level 4				
Fire Protection Systems Maintenance	Level 4				
Innovation Management	Level 4				
Internet of Things Application	Level 3				
Inventory Management	Level 3				
Lift Systems Maintenance	Level 4				

<b>Skills &amp; Competencies</b>	Maintenance Scheduling	Level 4
	Manpower Planning and Deployment	Level 3
	People Development	Level 4
	Platform Screen Door Maintenance	Level 4
	Project Management	Level 4
	Rail Regulatory Compliance	Level 4
	Report Writing	Level 3
	Robotics and Automation Application	Level 3
	Staff Performance Management	Level 3
	Stakeholder Management	Level 3
	Station Air-Conditioning Systems Maintenance	Level 4
	Systems Engineering Thinking	Level 4
	Technology Application	Level 2
	Vendor Management	Level 3
	Ventilation System Maintenance	Level 4
	Work at Heights	Level 3
	Workplace Facilities Safety Management	Level 3
	Workplace Safety and Health Culture Development	Level 4
	Workplace Safety and Health for Confined Spaces	Level 3
	Workplace Safety and Health for Electrical Safety	Level 3
Workplace Safety and Health for Fire Prevention and Fire Fighting	Level 2	
Workplace Safety and Health for Incident and Accident Investigation	Level 3	
<b>Programme Listing</b>	For a list of Training Programmes available for the Public Transport sector, please visit: <a href="http://www.skillsfuture.sg/skills-framework/public-transport">www.skillsfuture.sg/skills-framework/public-transport</a>	

The information contained in this document serves as a guide.