

**SKILLS FRAMEWORK FOR ENERGY AND CHEMICALS  
SKILLS MAP - SENIOR MAINTENANCE TECHNICIAN**

<b>Sector</b>	Energy and Chemicals			
<b>Track</b>	Engineering and Maintenance			
<b>Occupation</b>	Technician			
<b>Job Role</b>	Senior Maintenance Technician			
<b>Job Role Description</b>	<p>The Senior Maintenance Technician supports the planning and implementation of preventive and corrective maintenance activities to ensure process equipment and system availability and reliability for plant operations. He/She performs root cause analyses to investigate equipment failure causes, and tests and commissions new and/or modified process equipment and systems to ensure their functionality and safe operation. He coordinates turnaround maintenance work among team members. He may specialise in electrical, rotating, static or instrumentation and control related-maintenance work.</p>			
	<p>The Senior Maintenance Technician administers the Workplace Safety and Health (WSH) and Environmental Management Systems (EMS) by leading toolbox meetings and coordinating Safe System of Work (SSoW) procedures among team members. He coordinates contractors to ensure their compliance with WSH and EMS standards and practices. He is a member of the Emergency Response Team (ERT). In addition, he identifies opportunities for continuous improvement in the plant and provides guidance to junior staff.</p>			
	<p>The Senior Maintenance Technician works in the field, on either a rotating or day shift, and may be on call. He is a good team player, interacts effectively with others, and has good analytical and problem-solving skills.</p>			
<b>Critical Work Functions and Key Tasks</b>	<b>Critical Work Functions</b>		<b>Key Tasks</b>	
	Administer Workplace Safety and Health (WSH) and Environmental Management Systems (EMS)			Coordinate Safe System of Work (SSoW) procedures to ensure work activities are performed safely
				Coordinate with contractors to ensure compliance with the organisation's WSH and EMS standards and practices
				Ensure compliance with WSH and EMS systems among team members
				Ensure team members adhere to good housekeeping practices
				Lead toolbox meetings prior to starting work activities
				Participate in activity-based risk assessments
	Manage emergency responses and crises			Respond to emergencies as an Emergency Response Team (ERT) member
	Perform inspection and maintenance work			Apply emerging technologies to perform inspection and maintenance work
				Coordinate and prioritise plant preventive and corrective maintenance activities
				Coordinate maintenance work during turnarounds
				Coordinate routine monitoring and inspection of process equipment and systems
				Coordinate the troubleshooting and rectification of process equipment and systems
		Maintain Standard Operating Procedures (SOPs) for inspection and maintenance work		
		Perform root cause analyses of equipment failure		
Administer staff and organisational development			Perform testing and commissioning of new and/or modified process equipment and systems	
			Record maintenance and inspection work in the computerised maintenance management system (CMMS)	
			Contribute to continuous improvement initiatives and activities	
			Identify opportunities for continuous improvement	
<b>Skills &amp; Competencies</b>	<b>Technical Skills and Competencies</b>		<b>Generic Skills and Competencies (Top 5)</b>	
	Asset Integrity Management	Level 2	Problem Solving	Intermediate
	Continuous Improvement Management	Level 3	Communication	Intermediate
	Data and Statistical Analytics	Level 2	Teamwork	Intermediate
	Electrical Field Maintenance Management	Level 3	Managing Diversity	Intermediate
	Emergency Response Management	Level 3	Interpersonal Skills	Intermediate
	Engineering Drawing Interpretation and Management	Level 3		
	Environmental Management System Framework Development and Implementation	Level 3		
	Incident Investigation Management	Level 2		
	Inspection Engineering Management	Level 3		
	Instrumentation and Control Field Maintenance Management	Level 3		
	Instrumentation and Control System Maintenance Management	Level 3		
	Internet of Things Management	Level 2		
	Maintenance Planning and Scheduling	Level 3		

<b>Skills &amp; Competencies</b>	Mechanical Field Maintenance Management	Level 3	
	Plant Turnaround Management	Level 3	
	Preventive Maintenance Management	Level 3	
	Process Analyser Maintenance Management	Level 3	
	Procurement Management	Level 2	
	Project Management	Level 3	
	Robotic and Automation System Maintenance	Level 3	
	Robotic and Automation Technology Application	Level 2	
	Safe System of Work Development and Implementation	Level 3	
	Staff Management	Level 3	
	Technical Report Writing	Level 2	
	Third Party Management	Level 3	
	Training, Coaching and Assessment Management	Level 3	
	Workplace Safety and Health Framework Development and Implementation	Level 3	
	Workplace Safety and Health Hazard Identification and Risk Control Management	Level 3	
<b>Programme Listing</b>	For a list of Training Programmes available for the Energy and Chemicals sector, please visit: <a href="http://www.skillsfuture.sg/skills-framework/energyandchemicals">www.skillsfuture.sg/skills-framework/energyandchemicals</a>		

The information contained in this document serves as a guide.