

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

<b>Sector</b>	Energy and Chemicals			
<b>Track</b>	Production and Process Engineering			
<b>Occupation</b>	Technician			
<b>Job Role</b>	Senior Process Technician			
<b>Job Role Description</b>	The Senior Process Technician executes and maintains safe and reliable plant operations by performing routine process units and process utilities operations in control rooms and plant sites, as well as troubleshooting activities during all modes of plant operation. He/She reviews sampling and testing results and manipulates process parameters to meet product quality targets.			
	The Senior Process 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 to ensure work activities are performed safely. He supports the Site Incident Controller (SIC) during emergency response situations. He also contributes to staff and organisational development by identifying opportunities for continuous improvement and providing guidance to junior staff.			
	The Senior Process Technician usually works on a rotating shift, in a team, and in the field and/or control room. He is an analytical, decisive and results-driven team player.			
<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	Support the Site Incident Controller (SIC) during emergency response situations		
	Perform process units and utilities operations	Apply emerging technologies to perform process operational tasks		
		Coordinate the preparation of process equipment and work areas for mechanical, maintenance and turnaround works		
		Maintain Standard Operating Procedures (SOPs) for process operations		
		Operate robotic and automation technologies to perform plant surveillances and inspections		
		Perform start-up, monitoring, control and shutdown of process units and utilities in control rooms and plant sites		
Perform trending and analyses on data and information collated from the field and control systems				
Perform troubleshooting during all modes of operation, including process upset conditions				
Review sampling and testing results and manipulate process parameters to meet product quality targets				
Administer staff and organisational development	Use new data technologies to analyse plant and equipment performance			
	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>	
	Continuous Improvement Management	Level 3	Teamwork	Intermediate
	Control Room Operations Management	Level 3	Communication	Intermediate
	Data and Statistical Analytics	Level 2	Interpersonal Skills	Intermediate
	Emergency Response Management	Level 3	Digital Literacy	Basic
	Engineering Drawing Interpretation and Management	Level 3	Problem Solving	Basic
	Environmental Management System Framework Development and Implementation	Level 3		
	Feedstock and Product Transfer Operations Management	Level 3		
	Incident Investigation Management	Level 2		
	Internet of Things Management	Level 2		
	Operations Reporting Protocol Application	Level 3		
	Process Equipment Preparation for Mechanical Work	Level 3		
	Process Operations Troubleshooting	Level 3		
	Process Unit and Utilities Operations Management	Level 3		

<b>Skills &amp; Competencies</b>	Procurement Management	Level 2	
	Project Management	Level 3	
	Robotic and Automation Technology Application	Level 2	
	Safe System of Work Development and Implementation	Level 3	
	Sample Management	Level 2	
	Staff Management	Level 3	
	Standard Operating Procedure Development and Implementation	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 2	
<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.