

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

Sector	Energy and Chemicals			
Track	Production and Process Engineering			
Occupation	Technician			
Job Role	Process Technician			
Job Role Description	The Process Technician executes and maintains safe and reliable plant operations by performing routine process units and utilities operations at plant sites, as well as basic frontline maintenance activities, in accordance with Standard Operating Procedures (SOPs). He/She monitors process parameters and performs in-process sampling and basic testing to ensure that the product quality is within customers' requirements.			
	The Process Technician complies with Workplace Safety and Health (WSH) and Environmental Management System (EMS) requirements by applying Safe System of Work (SSoW) procedures when performing work activities, and responds to emergencies in the plant as a member of the Emergency Response Team (ERT). He contributes to organisational development by supporting continuous improvement projects.			
	The Process Technician usually works on a rotating shift, in a team, and in the field. He is a good team player and is able to interact effectively with others.			
Critical Work Functions and Key Tasks	Critical Work Functions		Key Tasks	
	Administer Workplace Safety and Health (WSH) and Environmental Management Systems (EMS)	Apply Safe System of Work (SSoW) procedures to ensure work activities are performed safely		
		Comply with WSH and EMS systems		
		Ensure contractors comply with the organisation's WSH and EMS standards and practices		
		Participate in activity-based risk assessments		
		Participate in toolbox meetings prior to starting work activities		
		Perform good housekeeping in the workplace		
	Manage emergency responses and crises	Respond to emergencies as an Emergency Response Team (ERT) member		
	Perform process units and utilities operations	Apply emerging technologies to perform process operational tasks		
		Apply Standard Operating Procedures (SOPs) for process operations		
Operate robotic and automation technologies to perform plant surveillances and inspections				
Perform basic frontline maintenance, process sampling and testing				
Perform routine field data logging and reporting				
Perform start-up, monitoring and shutdown of process units and utilities at plant sites				
Prepare process equipment and work areas for mechanical, maintenance and turnaround works				
Administer staff and organisational development	Support troubleshooting during all modes of operation, including process upset conditions			
	Use new data technologies to monitor plant and equipment performance			
Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Continuous Improvement Management	Level 2	Teamwork	Basic
	Data and Statistical Analytics	Level 2	Interpersonal Skills	Basic
	Emergency Response Management	Level 2	Communication	Basic
	Engineering Drawing Interpretation and Management	Level 2	Digital Literacy	Basic
	Environmental Management System Framework Development and Implementation	Level 2	Problem Solving	Basic
	Feedstock and Product Transfer Operations Management	Level 2		
	Incident Investigation Management	Level 2		
	Operations Reporting Protocol Application	Level 2		
	Preventive Maintenance Management	Level 1		
	Process Equipment Preparation for Mechanical Work	Level 2		
	Process Operations Troubleshooting	Level 2		
	Process Unit and Utilities Operations Management	Level 2		
	Robotic and Automation Technology Application	Level 2		
	Safe System of Work Development and Implementation	Level 2		
	Sample Management	Level 2		
	Standard Operating Procedure Development and Implementation	Level 2		
Third Party Management	Level 2			

Skills & Competencies	Workplace Safety and Health Framework Development and Implementation	Level 2	
	Workplace Safety and Health Hazard Identification and Risk Control Management	Level 2	
Programme Listing	For a list of Training Programmes available for the Energy and Chemicals sector, please visit: www.skillsfuture.sg/skills-framework/energyandchemicals		

The information contained in this document serves as a guide.