

**SKILLS FRAMEWORK FOR ENERGY AND CHEMICALS
SKILLS MAP - PRODUCTION SUPERVISOR**

Sector	Energy and Chemicals				
Track	Production and Process Engineering				
Occupation	Functional Leader				
Job Role	Production Supervisor				
Job Role Description	The Production Supervisor leads optimal and safe plant operations by managing routine process units and process utilities operations during his/her shift and by monitoring the plant's performance. He/She is responsible for executing production plans and schedules and controls production processes to meet product quantity and quality targets.				
	The Production Supervisor supervises staff and contractors' compliance with Workplace Safety and Health (WSH) and Environmental Management System (EMS) requirements and participates in WSH and EMS incident investigations. He leads emergency responses as the Site Incident Controller (SIC) of the organisation's Emergency Response Team (ERT). In addition, he takes charge of his shift team's personnel capability development by providing coaching and mentoring.				
	The Production Supervisor leads a team on a rotating shift in the field and/or control room. He has good leadership skills and encourages teamwork among his shift members. He interacts effectively with others and has good communication, analytical and problem-solving skills.				
Critical Work Functions and Key Tasks	Critical Work Functions		Key Tasks		
	Administer Workplace Safety and Health (WSH) and Environmental Management Systems (EMS)			Participate in WSH and EMS incident investigations	
				Supervise compliance with WSH and EMS systems	
				Supervise contractors to ensure compliance with the organisation's WSH and EMS standards and practices	
				Supervise good housekeeping in the workplace	
				Supervise the conduct of activity-based risk assessments	
				Supervise the execution of Safe System of Work (SSoW) procedures	
				Supervise toolbox meetings prior to starting work activities	
	Manage emergency responses and crises			Assist the organisation's crisis management team to continually improve crisis management plans	
				Lead emergency responses as the Site Incident Controller (SIC)	
	Perform process units and utilities operations			Execute production plans and schedules	
				Monitor and control production processes to meet product quantity and quality targets	
				Review data trends and analyses to monitor plant performance	
				Supervise the application of emerging technologies for process operational tasks within the team	
				Supervise the operation of robotic and automation technologies to perform plant surveillances and inspections	
		Supervise the preparation of process equipment and work areas for mechanical, maintenance and turnaround works			
		Supervise the start-up, monitoring, control and shutdown of process units and process utilities at control rooms and plant sites			
		Supervise troubleshooting during all modes of operation, including process upset conditions			
		Support the development and implementation of Standard Operating Procedures (SOPs) for process operations			
		Use new data technologies to review plant operations and equipment performance			
Administer staff and organisational development			Coach and mentor staff		
			Identify opportunities for continuous improvement		
			Manage resources within the team		
			Support the implementation of continuous improvement initiatives and activities		
Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)		
	Change Management	Level 4	Communication	Intermediate	
	Continuous Improvement Management	Level 3	Problem Solving	Intermediate	
	Control Room Operations Management	Level 4	Interpersonal Skills	Intermediate	
	Crisis Management	Level 3	Managing Diversity	Intermediate	
	Data and Statistical Analytics	Level 2	Resource Management	Basic	
	Emergency Response Management	Level 4			
	Engineering Drawing Interpretation and Management	Level 3			
	Environmental Management System Framework Development and Implementation	Level 3			
	Feedstock and Product Transfer Operations Management	Level 4			
	Incident Investigation Management	Level 3			
Internet of Things Management	Level 2				

Skills & Competencies	Operations Reporting Protocol Application	Level 4	
	Organisational Resource Management	Level 4	
	Plant Turnaround Management	Level 3	
	Process Equipment Preparation for Mechanical Work	Level 4	
	Process Operations Troubleshooting	Level 4	
	Process Unit and Utilities Operations Management	Level 4	
	Procurement Management	Level 3	
	Production Planning and Scheduling	Level 3	
	Project Management	Level 3	
	Robotic and Automation Technology Application	Level 3	
	Safe System of Work Development and Implementation	Level 3	
	Staff Development Management	Level 3	
	Staff Management	Level 4	
	Standard Operating Procedure Development and Implementation	Level 4	
	Technical Report Writing	Level 3	
	Third Party Management	Level 4	
	Training, Coaching and Assessment Management	Level 4	
Workplace Safety and Health Framework Development and Implementation	Level 3		
Workplace Safety and Health Hazard Identification and Risk Control Management	Level 3		
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.