

SKILLS FRAMEWORK FOR FOOD MANUFACTURING SKILLS MAP - ASSISTANT ENGINEER/ASSISTANT MAINTENANCE MANAGER				
<b>Sector</b>	Food Manufacturing			
<b>Track</b>	Production			
<b>Occupation</b>	Process Engineer			
<b>Job Role</b>	<b>Assistant Engineer/Assistant Maintenance Manager</b>			
<b>Job Role Description</b>	<p>The Assistant Engineer/Assistant Maintenance Manager plays an important role in maintaining smooth running of the food production plant's machinery and equipment, to ensure that key performance indicators (KPIs) for minimising downtime and production costs are met. He/She is a technical expert, who is able to diagnose problems with the plant's equipment and determine whether repairs can be performed by the organisation's own maintenance team, or if respective equipment vendors must be engaged.</p> <p>He possesses intimate knowledge of the production lines and the equipment used, and coordinates with the maintenance team, as well as various equipment vendors, to ensure timely supply, repair and maintenance of these equipment.</p> <p>He may work on shifts in food production environments, which may entail high temperatures for cooking, or cold temperatures for freezing and storage of food products. He has a keen interest in high-speed production machinery, strong communication skills, good teamwork and an analytical mind to ensure that all food production equipment-related issues are resolved appropriately and efficiently, while complying with food safety and Workplace Safety and Health (WSH) requirements.</p>			
<b>Critical Work Functions and Key Tasks</b>	<b>Critical Work Functions</b>	<b>Key Tasks</b>	<b>Performance Expectations (For legislated / regulated occupations)</b>	
	Set up and maintain food manufacturing equipment	Schedule repair and maintenance activities to minimise downtime during active production routines	In accordance with: <ul style="list-style-type: none"> <li>• ISO 22000:2005 - Food safety management systems</li> <li>• Singapore Standard (SS) 590:2013</li> <li>• SS 444:2010</li> <li>• Food Safety System Certification (FSSC) 22000</li> <li>• Good laboratory practices (GLP)</li> <li>• Good manufacturing practices (GMP)</li> </ul>	
		Develop work instructions and control plans for manufacturing processes		
		Diagnose abnormalities on food production equipment and appropriate repair activities		
		Assist to resolve facility maintenance issues		
		Assist in developing production processes and in equipment installations		
		Assist in equipment set-up and commissioning for mass production processes		
	Manage automated manufacturing operations	Ensure the robustness of food manufacturing processes with built-in, fool-proof mechanisms		
		Monitor and maintain manufacturing processes and equipment performance		
		Apply corrective actions for automatic and manual shut-downs during critical and emergency situations		
Troubleshoot process inconsistencies to maintain optimum facility performance				
Maintain hygiene, safety and standards	Comply with cleanliness and safety standards while setting up equipment and maintenance procedures			
	Control exposure of equipment contact parts, lubricants and other machinery components against ingredients, to ensure food safety			
	Maintain compliance with cleanliness standards, safety regulations and organisation requirements during production cycles			
Contribute to continuous improvement	Assist in implementation of improvement projects			
	Identify opportunities for continuous improvement projects relating to manufacturing and maintenance processes			
<b>Skills &amp; Competencies</b>	<b>Technical Skills and Competencies</b>		<b>Generic Skills and Competencies (Top 5)</b>	
	Active and Smart Packaging	Level 4	Problem Solving	Intermediate
	Advanced Processing Technology	Level 4	Decision Making	Intermediate
	Automated Food Manufacturing System Maintenance	Level 3	Leadership	Intermediate
	Automated Operation Monitoring	Level 3	Communication	Intermediate
	Automation Process Control	Level 4	Interpersonal Skills	Intermediate
	Business Negotiation	Level 3		
	Change Management	Level 3		
	Conflict Resolution	Level 4		
	Continuous Process Improvement	Level 3		
	Data Analytics System Design	Level 3		
	Data Synthesis	Level 4		

	Document Control	Level 3	
	Emergency Response Management	Level 3	
	Equipment Maintenance	Level 3	
	Food Manufacturing Facility Maintenance	Level 3	
	Food Manufacturing Process Design	Level 4	
	Food Safety Management	Level 2	
	Good Manufacturing Practices Implementation	Level 3	
	Green Manufacturing Design and Implementation	Level 4	
	Hazards and Risk Control, and Policy Management	Level 3	
	Innovation Management	Level 3	
	Internet of Things Management	Level 3	
	Manufacturing Process Management	Level 3	
	New Product Introduction for Food	Level 3	
	Process Validation	Level 3	
	Project Management	Level 4	
	Quality System Management	Level 3	
	Stakeholder Management	Level 3	
	Strategy Development	Level 4	
	Systems Thinking	Level 3	
	Technical Presentation	Level 4	
	Technical Report Writing	Level 3	
	Utilities Management	Level 4	
	WSH Performance Management	Level 3	
<b>Programme Listing</b>	For a list of Training Programmes available for the Food Manufacturing sector, please visit: <a href="http://www.skillsfuture.sg/skills-framework/foodmfg">www.skillsfuture.sg/skills-framework/foodmfg</a>		

The information contained in this document serves as a guide.