

SKILLS FRAMEWORK FOR FOOD MANUFACTURING SKILLS MAP - ASSISTANT FOOD TECHNOLOGIST				
<b>Sector</b>	Food Manufacturing			
<b>Track</b>	Research and Development			
<b>Occupation</b>	Food Science Professional			
<b>Job Role</b>	<b>Assistant Food Technologist</b>			
<b>Job Role Description</b>	<p>The Assistant Food Technologist supports product, packaging and process development by preparing equipment and materials, and assisting in consolidating data and results of experiments for defining the specifications of products and/or processes. He/She prepares samples and materials required for tests to characterise ingredients and determine product specifications. He supports the development and improvement of manufacturing processes by assisting in troubleshooting new and/or existing production processes to resolve production, quality and regulatory compliance issues.</p> <p>The Assistant Food Technologist may work in a food science laboratory and should be meticulous in checking that materials are at hand and verifying protocols to be used before starting procedures to conduct trials. He should be able to apply basic analysis to identify and derive solutions to issues within his area of work.</p>			
<b>Critical Work Functions and Key Tasks</b>	<b>Critical Work Functions</b>	Innovate new food products	Assist in identifying process control, sampling and monitoring points and related performance parameters to achieve critical material attributes of the final product	<b>Performance Expectations (For legislated / regulated occupations)</b>  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> <li>• Specifications within the <i>Codex Alimentarius</i></li> </ul>
			Assist in creating product prototypes through experimentation and laboratory tests	
			Assist in ingredient development and execution of related laboratory activities	
			Explore new applications of existing products and processes	
			Assist in data consolidation for new product specifications	
			Consolidate sensory testing and consumer data for further product refinements	
	Conduct tests for food quality	Prepare samples, standards and solutions for testing of new products		
		Conduct chemical and microbiological tests		
		Assist in physical testing on new food products from mass production		
		Assist in consolidating experimental data		
	Operationalise manufacturing of new products	Participate in production trials and record test and development data throughout the product development lifecycle		
		Assist in recipe formulation for mass production purposes and compliance to regulatory and other requirements		
		Study methods to improve quality of new food products and compliance with food regulations during mass production		
Assist in troubleshooting new or modified production processes to resolve production, quality and regulatory compliance issues				
Conceptualise marketing for products	Assist in identifying modifications to existing processes and equipment			
	Consolidate product formulations and other information to build product profiles for marketing			
<b>Skills &amp; Competencies</b>	<b>Technical Skills and Competencies</b>		<b>Generic Skills and Competencies (Top 5)</b>	
	Active and Smart Packaging	Level 3	Communication	Intermediate
	Advanced Processing Technology	Level 3	Teamwork	Basic
	Change Management	Level 3	Interpersonal Skills	Intermediate
	Chemical Risk Management	Level 2	Problem Solving	Basic
	Continuous Process Improvement	Level 3	Creative Thinking	Basic
	Data Synthesis	Level 4		
	Document Control	Level 2		
	Emergency Response Management	Level 2		
	Food Product Marketing	Level 3		
	Food Safety Analysis	Level 3		
	Food Safety Management	Level 2		
	Good Manufacturing Practices Implementation	Level 3		
	Green Manufacturing Design and Implementation	Level 3		
	Hazards and Risk Control, and Policy Management	Level 2		
Innovation Management	Level 3			

	Laboratory Data Analysis	Level 2	
	Laboratory Management	Level 2	
	New Product Introduction for Food	Level 3	
	Packaging Testing	Level 3	
	Process Validation	Level 2	
	Product Improvement	Level 3	
	Product Testing	Level 2	
	Project Management	Level 3	
	Quality Assurance Management	Level 3	
	Quality System Management	Level 2	
	Recipe Formulation	Level 4	
	Stakeholder Management	Level 3	
	Systems Thinking	Level 3	
	Technical Presentation	Level 4	
	Technical Report Writing	Level 2	
	WSH Performance Management	Level 2	
<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.