

SKILLS FRAMEWORK FOR FOOD MANUFACTURING SKILLS MAP - PRODUCT TECHNOLOGIST/INNOVATION MANAGER				
Sector	Food Manufacturing			
Track	Research and Development			
Occupation	Food Science Professional			
Job Role	Product Technologist/Innovation Manager			
Job Role Description	<p>The Product Technologist/Innovation Manager leads and initiates the development of food products and processes as driven by business needs of the organisation. He/She oversees new product development throughout its lifecycle from conception to manufacturing implementation, including the sensory evaluations of food products and definition of manufacturing formulation and process control parameters. He manages the developmental processes to ensure that the final products, packaging and processes meets the required technical, quality and regulatory standards.</p> <p>The Product Technologist/Innovation Manager may have the opportunity to travel overseas to explore new technologies and innovations in food products or validate the implementation of new manufacturing processes at overseas branches. He has a versatile and creative mind and is able to combine scientific knowledge with his passion for food and cooking to translate ideas into innovative products and solutions. He should have a passion for new knowledge and strong organisational and planning skills to motivate and drive a climate of innovation in his department.</p>			
Critical Work Functions and Key Tasks	Critical Work Functions	Innovate new food products	Define critical material attributes of final products that must be controlled to meet target product quality profiles	Performance Expectations (For legislated / regulated occupations)
			Oversee development of new and value-added products from conceptualisation to final production	
			Evaluate scientific information to generate concepts for new product innovations	
			Compile formulae, ingredient statements, and nutrition information for new products' conformance to regulations	
			Plan, manage and run panel sessions and sensory tests on experimental and new food products	
	Conduct tests for food quality	Develop sampling plans for new product testing		
		Develop testing protocols for materials, products and packaging for new products		
		Verify alignment of testing activities and procedures with established protocols		
		Verify documented test data for accuracy and possible issues with product safety and quality		
	Operationalise manufacturing of new products	Review technologies for scaling-up manufacturing processes for new products		
		Develop specifications for production, purchasing, and quality assurance in the commercialisation of new products to meet regulatory requirements and labelling standards		
		Work with all departments to coordinate new product production processes		
Conceptualise marketing for products	Provide product formulations for costing systems and relevant information to create accurate pricing data			
	Conceptualise "product stories" from food preparation processes for marketing purposes			
Drive innovation and research	Test and scale new and emerging food and business solutions			
	Refine parameters of new technologies application to improve properties of manufactured food products			
Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Active and Smart Packaging	Level 5	Communication	Advanced
	Advanced Processing Technology	Level 5	Creative Thinking	Advanced
	Budgeting	Level 4	Decision Making	Intermediate
	Business Continuity Management	Level 4	Problem Solving	Advanced
	Business Performance Management	Level 5	Interpersonal Skills	Advanced
	Change Management	Level 5		
	Chemical Risk Management	Level 4		
	Conflict Resolution	Level 5		
	Continuous Process Improvement	Level 5		
	Data Analytics System Design	Level 4		

Data Synthesis	Level 5
Document Control	Level 4
Emergency Response Management	Level 2
Food Manufacturing Process Design	Level 5
Food Safety Analysis	Level 4
Food Safety Management	Level 3
Good Manufacturing Practices Implementation	Level 4
Green Manufacturing Design and Implementation	Level 5
Hazards and Risk Control, and Policy Management	Level 3
Innovation Management	Level 5
Laboratory Data Analysis	Level 4
Laboratory Management	Level 4
New Product Introduction for Food	Level 4
Packaging Testing	Level 4
Process Validation	Level 4
Product Improvement	Level 5
Product Testing	Level 4
Project Management	Level 5
Quality Assurance Management	Level 4
Quality System Management	Level 4
Risk Management	Level 4
Stakeholder Management	Level 4
Strategy Development	Level 4
Systems Thinking	Level 5
Technical Presentation	Level 5
Technical Report Writing	Level 4
WSH Performance Management	Level 4
Programme Listing	For a list of Training Programmes available for the Food Manufacturing sector, please visit: www.skillsfuture.sg/skills-framework/foodmfg

The information contained in this document serves as a guide.