

SKILLS FRAMEWORK FOR ELECTRONICS SKILLS MAP - ASSISTANT INTEGRATION ENGINEER					
Sector	Electronics				
Sub-sector	Semiconductor and Data Storage				
Track	Technical and Engineering				
Occupation	Engineer				
Job Role	Assistant Integration Engineer				
Job Role Description	<p>The Assistant Integration Engineer applies engineering principles and techniques to support the analysis of process interactions and improve production yields in a manufacturing environment to meet organisational objectives. He/She also assists in analysing manufacturing processes and yield and/or reliability to ensure successful ramp up of new processes and/or products to production.</p> <p>In addition, the Assistant Integration Engineer participates in yield improvement projects, and partakes in the development of 'out of control' plans in accordance with organisational objectives.</p> <p>The Assistant Integration Engineer is required to have strong communication skills, good teamwork and an analytical mind to perform his role well to achieve the desired organisational outcomes.</p>				
Critical Work Functions and Key Tasks	Critical Work Functions		Key Tasks		
	Administer integration engineering		Interpret manufacturing processes and yields and/or reliability impact to enable successful ramp up of new processes and/or products to production		
			Support and implement process change requests		
			Implement robust technical improvement solutions		
	Control integration processes		Monitor 'Out of Control' (OOC) plans and maintain the Process Capability		
			Monitor in-line Statistical Process Control (SPC) parameters		
	Conform to management system requirements		Enforce good safety culture and manufacturing practices		
			Ensure adherence to processes and procedures		
			Ensure the robustness of processes using process control tools		
			Supervise manufacturing works for Workplace Safety and Health compliance		
	Contribute to continuous improvement		Assist in implementation of improvement projects		
			Identify opportunities for continuous improvement projects		
			Perform evaluation and/or experiments		
		Collect data for analysis			
Skills & Competencies	Technical Skills and Competencies			Generic Skills and Competencies (Top 5)	
	Audit Management	Level 4	Communication	Basic	
	Continuous Process Improvement	Level 3	Decision Making	Basic	
	Data Analytics Systems Design	Level 3	Leadership	Basic	
	Data Synthesis	Level 3	Lifelong Learning	Basic	
	Defect Density Monitoring	Level 3	Teamwork	Basic	
	Electrostatic Discharge Control	Level 3			
	Embedded Systems Integration	Level 4			
	Emergency Management	Level 3			
	Failure Analysis	Level 3			
	Good Manufacturing Practices Implementation	Level 3			
	Hazards and Risk Control, and Policy Management	Level 3			
	Innovation Management	Level 3			
	Internet of Things (IoT) Management	Level 3			
	Learning and Development	Level 2			
	Manufacturing Process Management	Level 3			
	New Product Introduction	Level 3			
	Parametric Testing	Level 3			
	Process Integration	Level 3			
	Quality Systems Management	Level 3			
	Report Writing	Level 3			
Solutioning	Level 4				
Technical Presentations	Level 4				
Workplace Safety and Health (WSH) Practices Implementation	Level 3				
Programme Listing	For a list of Training Programmes available for the Electronics sector, please visit: www.skillsfuture.sg/skills-framework/electronics				

The information contained in this document serves as a guide.