

SKILLS FRAMEWORK FOR ELECTRONICS SKILLS MAP - SENIOR PRODUCT ENGINEER					
<b>Sector</b>	Electronics				
<b>Sub-sector</b>	Semiconductor and Data Storage				
<b>Track</b>	Technical and Engineering				
<b>Occupation</b>	Engineer				
<b>Job Role</b>	<b>Senior Product Engineer</b>				
<b>Job Role Description</b>	The Senior Product Engineer generates test setup specifications and builds plans based on customers' test requirements for production to meet business needs. He/She, as the subject matter expert, is required to provide design solutions for products and establish product specifications to satisfy product requirements to meet organisational goals. He is responsible for formulating test programmes, hardware and major setup issues in mass production to ensure operations meets both internal and external parties' quality requirements.				
	He has to take the lead in managing cross-functional teams in continuous improvement projects and assist in implementing process improvement projects. He plays an important role in organisational development through the development of on-the-job training and mentoring of team leaders.				
	The Senior Product Engineer possesses an analytical mind and leadership skills to steer the team to perform their best and achieve the desired organisational outcomes.				
<b>Critical Work Functions and Key Tasks</b>	<b>Critical Work Functions</b>		<b>Key Tasks</b>		
	Administer product engineering			Generate test set-up specifications based on customers' requirements	
				Provide design solutions for products	
				Conduct qualification and validation tests for new materials	
				Design data monitoring systems to aid data analytics	
				Adopt new technologies to improve systems automation	
	Control product issues			Formulate test programmes, hardware and major set-up issues in mass production	
				Improve production yield to meet organisational goals	
				Review manufacturing process change requests	
				Establish product specifications to satisfy product requirements	
	Conform to Management System Requirements			Develop quality systems to ensure operations meets both internal and external parties' quality requirements	
				Enhance safety procedures and ensure good housekeeping in the respective area of responsibilities	
	Contribute to continuous improvement			Lead cross-functional teams in continuous improvement projects	
				Lead continuous improvement projects	
				Collaborate with stakeholders in improvement activities to meet organisational goals	
Influence organisational development			Develop on-the-job training programmes		
			Develop workplace learning plans		
			Develop team leaders through capability development and coaching		
			Lead team leaders in the development of business unit strategies and operational plans		
<b>Skills &amp; Competencies</b>	<b>Technical Skills and Competencies</b>			<b>Generic Skills and Competencies (Top 5)</b>	
	Audit Management	Level 5	Communication	Intermediate	
	Conflict Management	Level 4	Creative Thinking	Intermediate	
	Continuous Process Improvement	Level 5	Decision Making	Intermediate	
	Crisis Situations Management	Level 3	Leadership	Advanced	
	Data Analytics Systems Design	Level 5	Lifelong Learning	Intermediate	
	Effectiveness Management	Level 5			
	Enterprise Risk Management	Level 4			
	Factory Systems Management	Level 5			
	Failure Analysis	Level 5			
	Innovation Management	Level 4			
	Learning and Development	Level 4			
	Manufacturing Process Design	Level 6			
	Materials Qualification	Level 5			
	Metrology Management	Level 5			
	New Product Introduction	Level 5			
	Operations Management	Level 5			
	Organisational Analysis	Level 4			
	Organisational Strategising	Level 4			
	Product Testing	Level 5			
Production Resource Management	Level 5				

	Quality Systems Management	Level 5	
	Workplace Safety and Health (WSH) Systems Management	Level 5	
	Yield Analysis	Level 5	
<b>Programme Listing</b>	For a list of Training Programmes available for the Electronics sector, please visit: <a href="http://www.skillsfuture.sg/skills-framework/electronics">www.skillsfuture.sg/skills-framework/electronics</a>		

The information contained in this document serves as a guide.