

SKILLS FRAMEWORK FOR PRECISION ENGINEERING SKILLS MAP – AUTOMATION COORDINATOR/ROBOT COORDINATOR					
Sector	Precision Engineering				
Track	Technical and Engineering				
Occupation	Production Technician				
Job Role	Automation Coordinator/Robot Coordinator				
Job Role Description	<p>The Automation Coordinator/Robot Coordinator oversees automated equipment and robots used in manufacturing processes. He/She is the primary responder, responsible for troubleshooting automated production systems and performing preventive and predictive maintenance on equipment. He also contributes to process optimisation by managing data from automated manufacturing systems to facilitate real-time insight gathering and decision-making.</p> <p>He may be required to work on rotating shifts in a factory setting, and under strict compliance to workplace safety and health requirements, organisational quality control and other parameters.</p> <p>He is able to work independently, and as part of a team, to achieve production and quality targets, and interact effectively with others to ensure that all issues are resolved appropriately and efficiently.</p>				
Critical Work Functions and Key Tasks	Critical Work Functions	Manufacture components and end products	Key Tasks		Performance Expectations (For legislated / regulated occupations)
			Apply computer-aided design (CAD) to produce assembly, detail and layout drawings		
			Determine appropriate processes, tools and equipment for manufacturing products		
	Conform to management system requirements	Monitor and adjust process parameters to maintain or enhance production systems			
		Oversee shop floor operations for conformance to product and process specifications			
		Implement organisational quality systems in manufacturing production processes			
	Manage manufacturing process workflow	Apply standards and standard operating procedures (SOPs) related to manufacturing safety policies and procedures			
		Contribute to the design of manufacturing processes			
		Contribute to manufacturing process optimisation through technology			
		Investigate issues in manufacturing processes and product designs to formulate corrective measures			
	Contribute to continuous improvement	Coordinate maintenance of equipment and machinery			
		Assist in implementation of improvement projects			
		Identify opportunities for continuous improvement projects			
Perform evaluations and/or experiments					
Skills & Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top Level 5)		
	Additive Manufacturing	Level 2	Communication	Intermediate	
	Augmented Reality Application	Level 2	Digital Literacy	Intermediate	
	Automated Operation Monitoring	Level 3	Teamwork	Intermediate	
	Automated System Design	Level 2	Lifelong Learning	Intermediate	
	Automation Process Control	Level 4	Interpersonal Skills	Intermediate	
	Automation System Maintenance	Level 3			
	Cleanliness and Contamination Control	Level 2			
	Computer-aided Design	Level 2			
	Computer-aided Manufacturing	Level 2			
	Continuous Process Improvement	Level 2			
	Cutting	Level 3			
	Data Synthesis	Level 3			
	Embedded System Integration	Level 3			
	Emergency Response Management	Level 3			
	Equipment Maintenance	Level 3			
	Failure Analysis	Level 3			
	Innovation Management	Level 3			
	Internet of Things Management	Level 3			
	Laser and Optics Application	Level 2			

	Lean Manufacturing	Level 3	
	Machining	Level 2	
	Maintenance Coordination	Level 2	
	Manufacturing Process Management	Level 3	
	Manufacturing Technology	Level 2	
	Material Joining	Level 2	
	Non-destructive Testing	Level 4	
	Plastic Injection Moulding	Level 2	
	Pneumatic Systems Management	Level 2	
	Precision Measurement	Level 3	
	Product and Machine Assembly	Level 2	
	Production Line Set-Up	Level 2	
	Production Shut-down and Re-start	Level 3	
	Quality Process Control	Level 3	
	Quality System Management	Level 3	
	Surface Preparation and Protection	Level 2	
	Virtual Reality Application	Level 3	
	Workplace Safety and Health Practice	Level 3	
Programme Listing	For a list of Training Programmes available for the Precision Engineering sector, please visit: www.skillsfuture.sg/skills-framework/pe		