

SKILLS FRAMEWORK FOR AEROSPACE				
SKILLS MAP - Design Section Manager				
Sector	Aerospace			
Track	Manufacturing			
Occupation	Engineer			
Job Role	Design Section Manager			
Job Role Description	<p>The Design Section Manager leads the organisation's design department and is in charge of overseeing the design of new products and models. He/She leads the development of conceptual, basic and detailed engineering designs based on project requirements. He leads technical feasibility reviews and engineering studies. He approves design plans and final drawings for manufacturing. He provides expert guidance for creative and innovative design solutions. He leads organisation's safe and sustainable design initiatives and drive compliance with regulatory and legislative requirements. He also drives cross-team collaborations to resolve design and engineering gaps.</p> <p>He drives team performance to achieve business key performance indicators (KPIs) and leads talent recruitment and development plans. He is highly analytical, enjoys solving challenging problems, and is able to lead others effectively. He possesses strong project management and decision-making skills.</p>			
Critical Work Functions and Key Tasks / Performance Expectations	Critical Work Functions	Key Tasks		Performance Expectations (For legislated / regulated occupations)*
	Develop engineering designs	Devise process workflows to execute and approve system designs and engineering calculations		In accordance with: <ul style="list-style-type: none"> International Civil Aviation Organisation (ICAO) legislation Air Navigation Order (ANO) Singapore Airworthiness Requirements (SAR) Relevant foreign aviation legislations Workplace Safety and Health (WSH) Act Environmental standards Aerospace quality management system standards ISO, AN, MS, NAS and MIL standards Air Transport Association of America (ATA) standards Special process standards *Performance Expectations are non-exhaustive and subject to prevailing regulations
		Approve design plans based on technical feasibility and alignment with customer requirements		
		Verify final design drawings for manufacturing		
		Drive cross-team collaborations for resolution of design and engineering gaps		
	Conform to management system requirements	Establish new and revised standard operating procedures (SOPs) for manufacturing design		
		Manage compliance with legislative requirements and airworthiness standards		
		Review organisational quality and risk management systems for improvements		
	Contribute to continuous improvement	Develop sustainability practices for manufacturing		
		Lead cross-functional teams in continuous improvement projects		
		Develop lean practices for manufacturing		
		Lead research on market trends and technology applications to drive innovation		
	Manage people and organisational development	Develop data analytics plans for strategic decision-making		
		Implement functional plans to achieve business goals		
		Manage adherence to operating budgets for manufacturing		
		Collaborate with internal and external stakeholders to ensure smooth business operations		
Manage staff performance to achieve business key performance indicators (KPIs)				
Lead implementation of talent recruitment and development plans				
Technical Skills and Competencies			Generic Skills and Competencies	
Additive Manufacturing	Level 4	Problem Solving	Advanced	
Aerodynamics Principles Application	Level 4	Sense-Making	Advanced	
Aerospace Materials and Hardware Selection	Level 4	Creative Thinking	Advanced	
Applied Research and Development Management	Level 4	Decision Making	Advanced	
Artificial Intelligence Application	Level 4	Interpersonal Skills	Advanced	
Aviation Legislation Compliance	Level 4			
Big Data Analytics	Level 4			
Budgeting	Level 4			
Business Continuity Planning	Level 4			
Business Negotiation	Level 5			
Business Opportunities Development	Level 4			
Business Performance Management	Level 4			
Carbon Footprint Management	Level 5			
Change Management	Level 4			
Computer-aided Design Application	Level 5			

Skills & Competencies	Continuous Process Improvement	Level 4		
	Digital Techniques Application	Level 4		
	Electrical Fundamentals Application	Level 4		
	Electronic Fundamentals Application	Level 4		
	Engineering Problem Solving	Level 5		
	Engineering Product Design Facilitation	Level 5		
	Gas Turbine Engine Principles Application	Level 4		
	Green Manufacturing Design and Implementation	Level 4		
	Helicopter Aerodynamics, Structures and Systems Principles Application	Level 4		
	Human Factors Application and Error Management	Level 3		
	Innovation Management	Level 4		
	Internet of Things Implementation	Level 4		
	Knowledge Management	Level 4		
	Lean Manufacturing	Level 4		
	Piston Aeroplane Aerodynamics, Structures and Systems Principles Application	Level 4		
	Piston Engine Principles Application	Level 4		
	Project Management	Level 4		
	Propeller Principles Application	Level 4		
	Propulsion Principles Application	Level 4		
	Quality System Management	Level 4		
	Risk Compliance and Governance	Level 4		
	Robotics and Automation Application	Level 4		
	Stakeholder Management	Level 4		
	Strategy Planning	Level 4		
Turbine Aeroplane Aerodynamics, Structures and Systems Principles Application	Level 4			
Workplace Safety and Health Framework Development and Implementation	Level 4			
Programme Listing	For a list of training programmes available for the Aerospace sector, please visit < https://www.skillsfuture.sg/skills-framework/aero >			

The information contained in this