

SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – SOLUTIONS ARCHITECT		
Sector	Infocomm Technology	
Track	Strategy and Governance	
Sub-track	Enterprise Architecture	
Occupation	Enterprise Architect	
Job Role	Solutions Architect	
Job Role Description	<p>The Solutions Architect analyses, designs and develops roadmaps and implementation plans based on a current versus future state solutions architecture. He/She leads and facilitates the solutions architecture governance processes based on the enterprise architecture governance structure and manages exceptions to architectural standards at a solutions level. He assesses near-term needs to establish business priorities, analyses and develop solutions architectural requirements, and ensures alignment of architectural requirements with the IT strategy. He analyses the current architecture to identify weaknesses and identifies opportunities for improvement, and performs ongoing architecture quality review activities.</p> <p>He works in a dynamic and evolving business environment. He is familiar with enterprise architecture methodologies and frameworks, architecture modelling tools, as well as product development methodologies. He is knowledgeable about digital product development of industrial Internet of Things, applications and web services. He is also familiar with international telecommunications standards and protocols.</p> <p>The Solutions Architect is recognised as the most experienced and knowledgeable resources within the field in the organisation. He collaborates with other departments on architecting solutions design, and integrating diverse needs and perspectives to develop fresh ideas and solutions. He possesses strong leadership and communication abilities, is creative and innovative in nature, and is able to influence key stakeholders.</p>	
Critical Work Functions and Key Tasks	Critical Work Functions	Key Tasks
	Formulate the organisation's architecture strategy, roadmap, standards, policies and procedures, and governance	Lead and coordinate the domain technical and business discussions
		Participate in ecosystem strategy development, environment analyses and opportunity identification
		Analyse, design and develop roadmaps and implementation plans based on a current versus future state
		Design standard configurations and patterns
		Lead and facilitate the solutions architecture governance process based on the enterprise architecture governance structure
		Manage exceptions to architectural standards at a solutions level
		Review and approve recommendations to solutions architectural standards
	Develop architecture requirements and maintain oversight	Analyse and develop solutions architectural requirements
		Align architectural requirements with IT strategy
		Assess near-term needs to establish business priorities
		Ensure compatibility with existing solutions, infrastructure, services and strategic requirements
		Coordinate architecture implementation and modification activities
		Assist in post-implementation and continuous improvement efforts to enhance performance and provide increased functionality
		Ensure conceptual completeness of the technical solution
	Manage quality and continuous improvement of architecture	Analyse the current architecture to identify weaknesses and develop opportunities for improvement
		Identify and propose variances to the architecture to accommodate project needs
		Perform ongoing architecture quality review activities
		Consults with clients and IT teams on solutions architecture

	Research emerging technologies	Analyses cost versus benefits, risks, impact and technology priorities		
		Provide recommendations on emerging technology to senior management		
		Develop communication plans for solutions architecture		
		Lead the research and evaluation of emerging technology, industry and market trends to assist in project development		
		Identify organisational requirements for resources		
	Drive implementation of solutions architecture	Formulate the solutions viewpoint in which business, information and technology viewpoints are synthesised into solutions		
		Design and lead the implementation of the solution architecture		
		Define repeatable rules for the implementation of solutions in repeatable or reusable ways		
Skills and Competencies	Technical Skills and Competencies		Generic Skills and Competencies	
	Agile Software Development	Level 5	Decision Making	Advanced
	Applications Integration	Level 5	Interpersonal Skills	Intermediate
	Business Agility	Level 4	Problem Solving	Intermediate
	Business Environment Analysis	Level 4	Leadership	Advanced
	Business Innovation	Level 5	Resource Management	Intermediate
	Business Needs Analysis	Level 5		
	Business Performance Management	Level 4		
	Business Process Re-engineering	Level 5		
	Business Requirements Mapping	Level 5		
	Business Risk Management	Level 5		
	Change Management	Level 5		
	Data Visualisation	Level 5		
	Design Thinking Practice	Level 4		
	Embedded Systems Interface Design	Level 5		
	Emerging Technology Synthesis	Level 4		
	Enterprise Architecture	Level 4, Level 5		
	IT Strategy	Level 4		
	Networking	Level 4		
	Organisational Analysis	Level 5		
	Organisational Design	Level 4		
	Partnership Management	Level 5		
	Performance Management	Level 5		
	Process Improvement and Optimisation	Level 5		
	Project Feasibility Assessment	Level 4		
	Project Management	Level 5		

	Software Design	Level 5	
	Solution Architecture	Level 5	
	Stakeholder Management	Level 5	
	Strategy Implementation	Level 4	
	Strategy Planning	Level 4	
	Sustainability Management	Level 4	
	System Integration	Level 5	
Programme Listing	For a list of Training Programmes available for the ICT sector, please visit: www.skillsfuture.sg/skills-framework/ict		

The information contained in this document serves as a guide.