

SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – QUALITY ASSURANCE ENGINEER			
<b>Sector</b>	Infocomm Technology		
<b>Track</b>	Strategy and Governance		
<b>Sub-track</b>	Quality Management		
<b>Occupation</b>	Quality Specialist		
<b>Job Role</b>	<b>Quality Assurance Engineer</b>		
<b>Job Role Description</b>	<p>The Quality Assurance Engineer monitors the software development process to ensure design quality and adherence to standards. He/She is involved in tasks that include software design, source code development, review and control, configuration management and integration of software. He participates in a wide range of quality assurance testing and analyses to ensure that product meets or exceeds specified quality standards and end-user requirements before release.</p> <p>He works in a team setting and is proficient in programming languages required by the organisation. He is familiar with international quality standards and processes, as well as applicable test automation tools.</p> <p>The Quality Assurance Engineer takes pride in delivering quality service to internal stakeholders and is meticulous in conducting tests to ensure product quality requirements are met. He should be able to anticipate problems in the development process, and develop and articulate innovative and effective solutions to address them and prevent re-occurrence.</p>		
<b>Critical Work Functions and Key Tasks</b>	<b>Critical Work Functions</b>	<b>Key Tasks</b>	
	Develop plans to execute quality testing	Obtain technical documents to understand user requirements, product specifications and intended outcomes	
		Identify relevant features for quality testing	
		Develop test plans	
		Develop quality testing approach and steps to satisfy test objectives	
		Create test scenarios that complies with established testing procedures and guidelines	
		Work with relevant teams to plan for quality testing based on established testing procedures and guidelines	
	Perform quality testing	Conduct quality assurance tests against design requirements, and specifications	
		Analyse results from quality assurance tests to determine if the product fulfils performance standards and functional requirements as detailed in design requirements and specifications	
		Identify issues that arise from quality assurance tests	
		Apply existing procedures to solve routine or standard problems	
		Trace issues to relevant development stage and teams	
		Document quality assurance testing outcomes	
		Automate quality assurance testing for suitable types of tests and test processes	
		Keep track of improvements made to enhance quality of products	
	Optimise quality processes	Identify opportunities to decrease time and cost spent on system quality assurance processes	
		Propose improvements to optimise quality assurance testing process	
		Conduct research on industry best practices and new methodologies, practices and technologies to optimise quality assurance processes	
<b>Skills and Competencies</b>	<b>Technical Skills and Competencies</b>		<b>Generic Skills and Competencies</b>
	Applications Development	Level 3	Global Mindset Basic

	Budgeting	Level 3	Sense Making	Basic
	Business Needs Analysis	Level 3	Leadership	Basic
	Business Performance Management	Level 3	Interpersonal Skills	Basic
	Configuration Tracking	Level 1, Level 2	Teamwork	Basic
	Networking	Level 3		
	Partnership Management	Level 3		
	Problem Management	Level 3		
	Process Improvement and Optimisation	Level 3		
	Project Management	Level 3		
	Quality Assurance	Level 3		
	Quality Standards	Level 4		
	Software Design	Level 3		
	Software Testing	Level 2, Level 3		
	Stakeholder Management	Level 2, Level 3		
	Strategy Implementation	Level 3		
Test Planning	Level 2, Level 3			
Programme Listing	For a list of Training Programmes available for the ICT sector, please visit: <a href="http://www.skillsfuture.sg/skills-framework/ict">www.skillsfuture.sg/skills-framework/ict</a>			

The information contained in this document serves as a guide.