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| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – Quality assurance manager** | | | | | | |
| **Sector** | Infocomm Technology | | | | | |
| **Track** | Product Development | | | | | |
| **Sub-track** | Quality, Risk and Security | | | | | |
| **Occupation** | Quality Specialist | | | | | |
| **Job Role** | **Quality Assurance Manager** | | | | | |
| **Job Role Description** | The Quality Assurance Manager manages the conduct of various quality assurance tests and analyses to ensure that the product meets or exceeds specified quality standards and end-user requirements. He/She determines quality assurance testing objectives and reviews test plans to ensure alignment of quality testing governance framework and standards. He ensures that system tests are completed, documented and all problems are resolved before release to users. He anticipates internal and/or external business challenges and/or regulatory issues, and recommends process, product, or service improvements. He may lead projects or project steps within a broader project or have accountability for ongoing activities or objectives.  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.  The Quality Assurance Manager champions high service standards in ensuring products are issue-free and is methodical in performing quality assurance testing, anticipating problems and resolving issues that occur. He applies knowledge from multiple disciplines to develop innovative improvement solutions and communicate his improvement recommendations effectively. | | | | | |
| **Critical Work Functions and Key Tasks** | **Critical Work Functions** | **Key Tasks** | | | | |
| **Develop plans to execute quality testing** | Evaluate user requirements, product specifications and intended outcomes | | | | |
| Determine quality testing objectives, assumptions and hypotheses based on features to be tested and design specifications | | | | |
| Determine timelines, test environment, tools and approaches required, work allocation and responsibilities in quality testing | | | | |
| Review test plans for refinement to ensure robustness of testing | | | | |
| Review test scenarios for compliance with established testing procedures and guidelines | | | | |
| **Perform quality testing** | Oversee the conduct of quality assurance tests to validate fulfilment of product design requirements and specifications | | | | |
| Evaluate findings from quality assurance testing to validate achievement of quality standards and product functionalities based on design requirements and specifications | | | | |
| Manage investigation into quality issues for resolution | | | | |
| Recommend solutions to address quality issues | | | | |
| Validate resolution of quality issues | | | | |
| Develop reports documenting quality testing outcomes for the relevant development teams | | | | |
| Manage the automation of quality assurance testing for suitable types of tests | | | | |
| Review final products for adherence to quality standards | | | | |
| **Optimise quality processes** | Evaluate the efficiency and outcomes of existing quality processes | | | | |
| Review recommendations to optimise quality testing processes and improve quality systems | | | | |
| Assess new quality testing processes, practices, and tools for implementation to enhance quality systems | | | | |
| **Manage people and organisation** | Manage the budget expenditure and allocation across teams and projects | | | | |
| Track the team’s achievements and key performance indicators | | | | |
| Propose new operational plans, including targeted budgets, work allocations and staff forecasts | | | | |
| Optimise the use of resources | | | | |
| Develop learning roadmaps to support the professional development of the team | | | | |
| Manage the performance and development process, including providing coaching and development opportunities to maximise the potential of each individual | | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Critical Core Skills** | | |
| Learning and Development\* | | Level 4 | Decision Making | | Intermediate |
| Manpower Planning\* | | Level 4 | Developing People | | Intermediate |
| People and Performance Management\* | | Level 4 | Global Perspective | | Intermediate |
| Performance Management\* | | Level 4 | Problem Solving | | Advanced |
| Problem Management\* | | Level 4 | Sense Making | | Intermediate |
| Process Improvement and Optimisation\* | | Level 4 |  | | |
| Quality Assurance\* | | Level 4 |
| Quality Standards\* | | Level 5 |
| Software Testing\* | | Level 4 |
| Stakeholder Management\* | | Level 4 |
| Test Planning\* | | Level 4 |
| AI Ethics and Governance | | Level 4 |
| Budgeting | | Level 4 |
| Business Agility | | Level 4 |
| Business Needs Analysis | | Level 4 |
| Business Performance Management | | Level 4 |
| Configuration Tracking | | Level 3 |
| Networking | | Level 4 |
| Partnership Management | | Level 4 |
| Product Management | | Level 3 |
| Project Management | | Level 4 |
| Quality Engineering | | Level 4 |
| Risk Compliance and Governance | | Level 4 |
| Software Design | | Level 4 |
| Strategy Implementation | | Level 4 |
| **Programme Listing** | For a list of Training Programmes available for the ICT sector, please visit: www.skillsfuture.sg/skills-framework/ict | | | | | |
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| The information contained in this document serves as a guide.  \*Note: Technical Skills and Competencies (TSCs) with an asterisk (\*) refer to Priority Skills (i.e., TSCs to be prioritised for this role). | | | | | | |