The Software Quality Assurance Manager oversees and plans quality control and analysis of software to meet or exceed specified standards and end-user requirements. He/she is responsible for the performance and results of the team. He develops departmental plans and priorities to address resource and operational challenges, he guides decisions and problem solving through policies and procedures and business plan. He provides technical guidance to stakeholders within and across quality assurance best practices.

As someone who manages the quality of software products from end to end, he is able to readily integrate and apply knowledge from multiple disciplines across software and quality assurance. He is able to develop innovative and effective solutions to issues encountered, communicate his plans and advice in a clear and compelling manner that inspires action.

### Critical Work Functions and Key Tasks / Performance Expectations

#### Implement quality assurance strategy
- Develop quality assurance strategies to address all phases of product development
- Oversee the day-to-day management of all functional areas of quality assurance
- Drive the application of new technologies, compliance and security standards
- Advocate for software quality and excellence throughout the organisation

#### Develop software quality guidelines
- Endorse software quality guidelines
- Align quality standards with best practices and business goals
- Establish processes and mechanisms to inspect software and report quality issues
- Establish policies for documentation of procedures and end-user experience of products
- Drive compliance with defined software quality specifications
- Resolve escalated issues of non-compliance with software quality specifications

#### Oversee software development process
- Develop plans for quality assurance tasks
- Lead project teams to achieve quality assurance milestones and objectives
- Perform solution assurance activities for software development proposals to ensure viability and uncover potential risks
- Drive the achievement of higher quality standards by developers and the quality assurance team
- Approve new solutions, best practices, design approaches and technologies
- Retain accountability for software projects meeting timelines, budgets and quality standards

#### Guide quality assurance testing
- Establish quality assurance strategy for software
- Lead the design and implementation of testing frameworks, test infrastructure and tools
- Oversee the execution of all test scripts and end user experience tests
- Support the re-creation and validation of user reported issues
- Provide general supervision and technical guidance for quality assurance testing
- Recommend solutions to resolve significant quality issues
- Retain accountability for software products complying with technical specifications and quality standards

#### Optimize quality assurance processes
- Drive continuous improvement in quality assurance
- Develop sustainable quality assurance processes
- Endorse improvements to optimize quality assurance processes
- Secure buy-in for new investments in quality assurance process
- Develop quality assurance metrics

#### Manage projects
- Plan project timelines and resources for quality assurance activities
- Drive the use of project management tools and processes
- Communicate project objectives and updates at critical junctures to obtain buy-in from stakeholders
- Coordinate interdepartmental activities for software development and deployment
- Anticipate software release challenges
- Monitor all operations that affect software quality assurance

### Technical Skills & Competencies

<table>
<thead>
<tr>
<th>Skills &amp; Competencies</th>
<th>Technical Skills &amp; Competencies</th>
<th>Generic Skills &amp; Competencies (Top 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Needs Analysis</td>
<td>Level 4</td>
<td>Communication</td>
</tr>
<tr>
<td>Configuration Tracking</td>
<td>Level 4</td>
<td>Creative Thinking</td>
</tr>
<tr>
<td>Performance Management</td>
<td>Level 3</td>
<td>Leadership</td>
</tr>
<tr>
<td>Problem Management</td>
<td>Level 5</td>
<td>Problem Solving</td>
</tr>
<tr>
<td>Programme Management</td>
<td>Level 5</td>
<td>Transdisciplinary Thinking</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>Level 5</td>
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<td>Quality Engineering</td>
<td>Level 5</td>
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<td>Quality Standards</td>
<td>Level 5</td>
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<tr>
<td>Software Design</td>
<td>Level 4</td>
<td></td>
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<tr>
<td>Software Testing</td>
<td>Level 4</td>
<td></td>
</tr>
<tr>
<td>Stakeholder Management</td>
<td>Level 4</td>
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</tr>
<tr>
<td>Test Planning</td>
<td>Level 3</td>
<td></td>
</tr>
</tbody>
</table>

### Programme Listing

For a list of Training Programmes available for the Infocomm Technology sector, please visit: [www.skillsfuture.sg/skills-framework/ict](http://www.skillsfuture.sg/skills-framework/ict)