

# Software QA Engineer and Tester

Information Technology  
Series

## Company Overview:

<Please insert a short paragraph talking about your company and what makes it unique. Include details that capture the core values, culture, and mission of your company, so job seekers clearly understand the environment in which they will be working.>

---

## Job Summary and Responsibilities:

Software quality assurance engineers and Testers assist employers by developing and then executing test plans to identify software problems and their causes. QA engineers and Testers work closely with product owners to understand product specifics and to develop improvement strategies. Candidates should understand how to identify measures of system quality and performance and how to develop appropriate testing tools. Ideally, applicants are familiar with the basics of computer programming (e.g., system structure, application processes, etc.) and core coding languages such as Java and C#.

<Add any additional responsibilities or changes relevant to this role at your company.>

---

## Required Competencies:

### OCCUPATIONAL COMPETENCIES

- **Testing:** Ability to design tests, create test scripts, ensure that test cases mimic user usage, execute and validate unit tests, and use appropriate test tools for their own changes; familiarity with system and performance testing
- **Scripting:** Familiarity with the use of common scripting languages such as PERL, Python, or shell scripts
- **Tech Support:** Familiarity with commonly-used computer hardware, software, applications, etc. and a basic ability to diagnose problems and provide troubleshooting and issue documentation; ability to operate technological tools



## FOUNDATIONAL COMPETENCIES

- **Quality Control Analysis:** Understand how to identify and test system boundaries, quality and performance; use basic coding concepts to identify weaknesses (e.g., unintended values, system architecture, process flow); able to evaluate multiple components of software quality
- **Critical Thinking:** Use logic and reasoning to identify program requirements and purpose to determining potential weaknesses; capture and prioritize the impact of identified bugs; assuming viewpoints of many possible users when testing a program and assessing quality
- **Communication:** Use reading, writing, and speaking skills to gather detailed system requirements for testing and recording results; use effective writing and speaking to present key information to the relevant parties

*Find additional competencies for this role using Skillful's occupation deep dive at [www.skillful.com/employers](http://www.skillful.com/employers).*

---

## Preferred Competencies:

### OCCUPATIONAL COMPETENCIES

**General Database:** Proficiency with SQL basics (e.g., selecting, inserting, updating, deleting records), at least one database management software application, and database fundamentals such as normalization, schemas, and relationships

### FOUNDATIONAL COMPETENCIES

- **Systems Evaluation:** Identify measures or indicators of system performance; able to predict the impact of changes on the system; differentiate between perceived and actual performance value; familiarity with individual components and their connection to overall system
- **Active Learning:** Take time to understand the points being made, ask questions and clarify details as appropriate; incorporate details from interactions into testing plans and reports; drawing appropriate conclusions using previous experience and knowledge



## Example Activities:

- Design and execute test plans, scenarios, scripts, or procedures
  - Test system modifications to prepare for implementation
  - Develop testing programs that address areas such as database impacts, software scenarios, regression testing, negative testing, error or bug retests, or usability
  - Document software defects, using a bug tracking system, and report defects to software developers
- 

## Required Certifications:

<Note: Insert Required Certifications *but only if truly required.*>

---

## Job Details:

- Location
- Department
- Job ID
- Classification
- Insert additional details of this position if applicable