# **Overview**

## Overview

| Inactive                 | No                                 |
|--------------------------|------------------------------------|
| View As Of               | 07/08/2025                         |
| Date of Last Change      | 07/08/2025 10:18:22.887 AM         |
| Job Profile Name         | 03C QA ENGINEER IV 020025          |
| Job Code                 | C_020025                           |
| Include Job Code in Name | No                                 |
| Job Profile Summary      | This Job Description is for the In |

r the Information Technology Job Family, and could include anyone within the ITS department that performs these tasks. An ideal candidate must have knowledge of and be able to perform actions that are related to activities in the designated business line. The QA Engineer position designs or modifies testing/data validation/quality assurance for automated applications and procedures for solutions to the most highly complex business problems. Also has full operational knowledge of all phases of testing and is able to work independently at the highest level of complexity related to quality assurance. Directs and reviews work of lower-level personnel and/or may perform as an individual contributor and/or lead large and complex systems. Has thorough understanding of one or more FRS system testing platforms.

#### Job Description

## 20%

AUTOMATION, PERFORMANCE, AND DEVELOPMENT TESTING TRACK:

- Develops functional and system level test automation in a multi-tiered environment using modern frameworks such as Selenium, UFT, Loadrunner/Performance Center, Jmeter and other industry tools approved for use at FRS as applicable.
- Using programming languages like C#, Python or Java with a modern IDE (Visual Studio, IntelliJ, or similar), and source code management products like TFS/Azure DevOps, GIT and Subversion.

#### DATABASE/DATA VALIDATION TESTING TRACK:

- Develop comprehensive data verification and validation for backend data-oriented systems using modern frameworks such as Pandas, Informatica and other industry tools approved for use at FRS as applicable.
- Using scripting/programming languages like Python and R with a modern IDE (Anaconda, Jupyter notebook, or similar), and source code management products like GIT and Subversion.

## ENGAGEMENT MANAGEMENT TESTING TRACK:

- Manages the engagement from estimation through post completion, including development of SOW/MOU, SQA resource allocations, tracking of funding and managing customer expectations.
- Incorporates functional and system level test strategies/plans in a multi-tiered environment coordinating the use of modern frameworks (such as Selenium, UFT, Loadrunner/Performance Center, Jmeter), Data verification/validation systems (such as Pandas, Informatica) and other industry tools approved for use at FRS as applicable.

• Project manages the resources using programming languages like C#, Python, R or Java with a modern IDE (Visual Studio, IntelliJ, Anaconda, Jupyter or similar), and source code management products like TFS/Azure DevOps, GIT and Subversion.

## 40%

## AUTOMATION, PERFORMANCE, AND DEVELOMENT TESTING TRACK:

- Develops solutions and methodologies to automate testing of applications built using technologies and frameworks such as HTML, CSS, JavaScript, jQuery, TypeScript (Angular), KendoUI, Bootstrap, Postman, SoapUI and other industry tools approved for use at FRS as applicable.
- Scaling test efforts and building reusable components over multiple engagements. Generate and share test execution reports.

#### DATABASE/DATA VALIDATION TESTING TRACK:

• Develops solutions to automate testing of databases and ETL processes built using technologies and frameworks such as SSIS, Oracle Integration products, Data Warehouse products and other industry tools approved for use at FRS as applicable.

#### ENGAGEMENT MANAGEMENT TESTING TRACK:

 Develops solutions and methodologies to manage the overall SQA Services engagement. Including exploratory testing and all automated testing of applications built using technologies and frameworks for automation (such as HTML, CSS, JavaScript, jQuery, TypeScript (Angular), KendoUI, Bootstrap), for Database/data validation (such as SSIS, Oracle Integration products, Data Warehouse products) and other industry tools approved for use at FRS as applicable.

#### 10%

Incorporate the tests aligned with the application under test database schemas using complex stored procedures and queries in environments such as SQLServer, Oracle, or similar.

#### 10%

Mentors QA Engineers by providing direction and guidance when needed.

#### 10%

Participates on project teams as a senior QA Engineer.

#### 10%

Participates on Bank, department, or system projects of moderate to high complexity. Demonstrates effective Core Competency skills for grade and position. Performs other related duties as assigned. Actively involved in the accomplishment of departmental and Bank wide quality initiatives. Complies with all applicable information security policies, guidelines, and practices.

Subordinates: None

Scope Measurements: Department Budget

#### Knowledge and Skills:

• Excellent written and oral communications skills.

Independently, presents both orally and in writing, findings, and assessments; prepares and presents information and responses to highly complex inquiries; demonstrates the ability to manage the communication process; the ability to communicate with clients, colleagues and management to explain complex issues clearly and concisely; actively engages in transferring technical knowledge; diffuses conflict and builds consensus.

• Excellent analytical and problem-solving skills.

Possesses a logical, analytical and creative approach to problems; Demonstrates expert level analytical and problem-solving skills; organizes data and information in a manner that effectively communicates issues; identifies underlying issues or problems and recognizes symptoms that indicate more severe problems or issues.

• Excellent interpersonal skills.

Demonstrates the ability to lead and participate effectively on a team; leads complex and diverse team efforts by virtue of both technical expertise and leadership skills of influence; recognizes the value that different perspectives and cultures bring to an organization; draws on experience to resolve highly complex issues; displays strong interpersonal skills in dealing with people at all levels of an organization.

· Excellent time management skills.

Possess a meticulous and organized approach to work; Identifies and assesses highly complex supervisory issues; effectively manages highly complex issues to meet our objectives and goals.

- Excellent knowledge of various computer systems and technologies with an ability to learn new skills and technology quickly. An awareness of current issues affecting the industry and its technologies.
- Subject to minimal or no oversight in work performed; serves as mentor and/or coach and provides constructive feedback to less experienced staff; engages other stakeholders in collecting feedback and input to complete work activities.

# Education and Experience:

Bachelor's degree with a concentration in Information Technology or Computer Science or equivalent significant experience in information technology and software testing is required.

## AUTOMATION, PERFORMANCE AND DEVELOPMENT TESTING TRACK:

- Minimum of 7 years of experience designing and developing test automation using a software development approach.
- Minimum of 5 years of automation development experience with technologies described above.

DATABASE/DATA VALIDATION TESTING TRACK:

- Minimum of 7 years of experience designing and developing tests for ETL and Data Warehouse solutions using a software development approach.
- Minimum of 5 years of automation development experience with technologies described above.

#### ENGAGEMENT MANAGEMENT TESTING TRACK:

- Minimum of 7 years of experience designing/developing test strategy/plans and test management/testing supporting a software development approach.
- Minimum of 5 years of managing testing, engagements or project management.

CTFL and Product Specific Certifications as applicable per track are preferred.

#### Physical Requirements: None

This document indicates the general nature and level of work performed by employees within this position. It is not a comprehensive inventory of all duties, responsibilities, and qualifications required of employees assigned to this job. An employee's responsibilities, tasks, and duties might differ from those outlined in the job description, and other duties, as assigned, are a part of the job. The Federal Reserve Bank of Philadelphia reserves the right to modify the elements of this job description, as business needs require.

#### Additional Information (Internal Only) Job Title Default **QA ENGINEER IV** Restrict to Country Management Level Individual Contributor Job Level Individual Contributor - 4 Job Family Development/Engineering Job Category 1020 - SoftwareDevelopers,ApplicationsAndSystemsSoftware (US OCC-United States of America) 2 - Professionals (EEO1CODE-United States of America) Job Classifications C2A1 - Senior IT Professionals (EEO JOB GROUP-United States of America) IT - IT Professional (no Cyber/IS) (APT Classification-United States of America) ZS - Professional Generalists (EEO5CODE-United States of America) Work Shift Required Yes Public Job Yes **Referral Payment Plan** Characteristics Difficulty to Fill

Critical Job No

# Compensation

Compensation Grade 03C 016 Annual Compensation Grade Profile

Impacted Eligibility Rules

# **Business Process History**

**Business Process History** 

| Business Process                            | Effective Date | Initiated On           | Completed On           | Status                 |
|---|----------------|------------------------|------------------------|------------------------|
| Edit Job Profile: 03C QA ENGINEER IV 020025 | 07/01/2025     | 07/08/2025 08:36:03 AM | 07/08/2025 10:18:22 AM | Successfully Completed |
| Edit Job Profile: 03C QA ENGINEER IV 020025 | 05/01/2025     | 07/01/2025 01:31:49 PM | 07/01/2025 05:26:19 PM | Successfully Completed |
| Edit Job Profile: 03C QA ENGINEER IV 020025 | 12/16/2024     | 12/16/2024 08:36:04 AM | 12/16/2024 08:36:04 AM | Successfully Completed |
| Edit Job Profile: 03C QA ENGINEER IV 020025 | 12/16/2024     | 12/16/2024 08:25:38 AM | 12/16/2024 08:25:38 AM | Successfully Completed |

# Pay

# Pay Rate Type

Pay Rate Types

|                          | Country | Pay Rate Type |
|--------------------------|---------|---------------|
| United States of America |         | Salary        |
| Job Exempt<br>Job Exempt |         |               |

| Country / Country Region | Job Exempt |
|--------------------------|------------|
| United States of America | Yes        |

# Workers' Compensation Code

Worker's Compensation Codes

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