

TEST AUTOMATION ENGINEER

BRANCH/UNIT	Systems Group		
TEAM	Solutions Delivery / DevOps and Release		
LOCATION	TBA		
CLASSIFICATION/GRADE/BAND	TAFE Worker Level 8		
POSITION NO.	TBA		
ANZSCO CODE	261112	PCAT CODE	TBA
TAFE Website	www.tafensw.edu.au		

1. ORGANISATIONAL ENVIRONMENT

TAFE NSW's purpose is to skill the workforce of the future. It is Australia's leading provider of vocational education and training with over 500,000 annual enrolments and a proud history for setting the benchmark for quality service. As the NSW public provider, it supports the NSW Government's priority to grow skills for the economy and jobs of tomorrow. Critically, TAFE NSW plays a vital role in providing vocational education in rural and regional NSW, and job training pathways for the most vulnerable in the community.

TAFE NSW offers the best of campus-based delivery as well as flexible, online and work-based learning. The TAFE NSW values of Customer First, Collaboration, Integrity and Excellence guide our team in strengthening communities, delivering world-class training for our students and producing job ready graduates for employers. The operating environment for TAFE NSW is dynamic as we leverage our scale, expertise, passion and reputation to meet the rapidly changing VET landscape.

TAFE NSW is committed to its students and customers and the role it plays in changing lives and opening up opportunities through learning.

2. POSITION PURPOSE

The Test Automation Engineer is responsible for designing, developing and executing automated test scripts, maintaining the automation framework and implementing automation strategies that will enhance test execution and consistency.

3. KEY ACCOUNTABILITIES

1. Develop and configure test automation networks and plan, document and undertake stability and performance testing.
2. Apply, design and develop automated testing strategies to enhance test execution and build automated testing frameworks to ensure identification of bugs, software quality issues, reduction in the need for manual testing and test consistency.
3. Analyse, verify best-automated test approaches, and execute acceptance, integration, installation and system testing.
4. Define and document acceptance criteria for testing using various methodologies derived from the testing requirements, such as Waterfall, Agile and hybrid approaches, in order to ensure effective system assessments.
5. Provide accurate and precise estimates for assigned testing duration, confidence levels and foreseeable dependencies, based on analysis of the test requirements, as required by project managers, in order to ensure effective testing protocols and smooth system usage.
6. Design and develop automated testing strategies and plans for various test phases, based on available project documentation, including system testing, system integration testing, user acceptance testing, regression testing and production verification testing, in order to build automated testing frameworks and ensure stability of software products.
7. Review functional and technical requirements, perform research and analysis of test data as required for test examination to ensure products are fully usable and acceptable for release.
8. In conjunction with the Manager Testing & Quality Assurance, establish best practice policies, processes, templates and tools to ensure system products meet high quality standards when released into the TAFE NSW environment.
9. Produce testing options and solutions that ensure the effective performance of Systems Group systems and products to the intended TAFE NSW operating environment.
10. Reflect TAFE NSW's values in the way you work and abide by policies and procedures to ensure a safe, healthy and inclusive work environment.
11. Place the customer at the centre of all decision making.
12. Work with the Line Manager to develop and review meaningful performance management and development plans.

4. KEY CHALLENGES

- Developing and maintaining currency of understanding of the organisation's range of applications and impact of new developments.
- Being responsive to traditional and agile testing activities.

5. KEY RELATIONSHIPS

WHO	WHY
Internal	
Manager Testing and Quality Assurance	<ul style="list-style-type: none"> • Receive advice, direction and support. • Escalate issues where necessary, advise and recommend solutions. • Collaborate on development of quality related tools.
Work Team	<ul style="list-style-type: none"> • Support team, work collaboratively to contribute to achieving organisation's business goals.
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	<ul style="list-style-type: none"> Participate in meetings to obtain the work group perspective and share information.
Clients/Customers	<ul style="list-style-type: none"> Resolve and provide solutions to issues. Liaise on testing activities. Receive business requirements specifications and provide feedback on performance of testing.

6. POSITION DIMENSIONS

Reporting Line: Manager Testing & QA

Direct / Indirect Reports: Nil

Financial delegation: TBA

Budget / Expenditure: TBA

Decision Making:

- Makes decisions, on complex and sensitive issues that have a high level impact on the immediate work area and the potential to impact more broadly on agency operations and externally.
- Matters requiring a higher level of approval are referred to the Reporting Line Manager.

7. ESSENTIAL REQUIREMENTS





- Degree in relevant discipline or equivalent skills, knowledge and experience
- Experience in test automation framework and script designing
- Demonstrated experience working as part of a Systems Group project delivery team performing activities to strict deadlines.
- Ability to address and meet focus capabilities as stated in the position description.

8. CAPABILITIES


NSW Public Sector Capability Framework

Below is the full list of capabilities and the level required for this role as per the [NSW Public Sector Capability Framework](#). The capabilities **in bold** are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities. Capability levels are as follows and reflect a progressive increase in complexity and skill:

Foundational > Intermediate > Adept > Advanced > Highly Advanced

CAPABILITY GROUP	NAME	LEVEL
 Personal Attributes	Display Resilience & Courage	Foundational
	Act with Integrity	Intermediate
	Manage Self	Intermediate
	Value Diversity	Foundational
 Relationships	Communicate Effectively	Adept
	Commit to Customer Service	Foundational
	Work Collaboratively	Intermediate
	Influence and Negotiate	Intermediate
 Results	Deliver Results	Intermediate
	Plan And Prioritise	Intermediate
	Think and Solve Problems	Intermediate
	Demonstrate Accountability	Intermediate
 Business Enablers	Finance	Foundational
	Technology	Adept
	Procurement and Contract Management	Foundational
	Project Management	Intermediate

Occupation / profession specific capabilities

Capability Set	Category, Sub-category and Skill	Level and Code
	Development & Implementation, Systems Development, Testing	Level 4 - TEST
	Change & Transformation Business Change Management, Business Process Testing	Level 4 - BPTS
	Delivery & Operation , Service Transition, Service Acceptance	Level 4 - SEAC

FOCUS CAPABILITIES

The focus capabilities for the Test Automation Engineer are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the position's key accountabilities.

NSW Public Sector Focus Capabilities

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Personal Attributes Manage Self	Intermediate	<ul style="list-style-type: none"> Adapt existing skills to new situations. Show commitment to achieving work goals. Show awareness of own strengths and areas for growth and develop and apply new skills. Seek feedback from colleagues and stakeholders. Maintain own motivation when tasks become difficult.
Relationships Communicate Effectively	Adept	<ul style="list-style-type: none"> Tailor communication to the audience. Clearly explain complex concepts and arguments to individuals and groups. Monitor own and others' non-verbal cues and adapt where necessary. Create opportunities for others to be heard. Actively listen to others and clarify own understanding. Write fluently in a range of styles and formats.

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Results		
Deliver Results	Intermediate	<ul style="list-style-type: none"> Complete work tasks to agreed budgets, timeframes and standards. Take the initiative to progress and deliver own and team/unit work. Contribute to allocation of responsibilities and resources to ensure achievement of team/unit goals. Seek and apply specialist advice when required.
Business Enablers		
Technology	Adept	<ul style="list-style-type: none"> Demonstrate a sound understanding of technology relevant to the work unit, and identify and select the most appropriate technology for assigned tasks. Identify opportunities to use a broad range of communications technologies to deliver effective messages. Understand, act on and monitor compliance with information and communications security and use policies. Identify ways to leverage the value of technology to achieve team/unit outcomes, using the existing technology of the business. Support compliance with the records, information and knowledge management requirements of the organisation.

Occupation specific capability set (Skills Framework for the Information Age – SFIA)

Category and Sub-Category	Level and Code	Level Descriptions
Solution Development & Implementation	Level 4	
Systems Development	TEST	<p>Testing (TEST) - Accepts responsibility for creation of test cases using own in-depth technical analysis of both functional and non-functional specifications (such as reliability, efficiency, usability, maintainability and portability). Creates traceability records, from test cases back to requirements. Produces test scripts, materials and regression test packs to test new and amended software or services. Specifies requirements for environment, data, resources and tools. Interprets, executes and documents complex test scripts using agreed methods and standards. Records and analyses actions and results, and maintains a defect register. Reviews test results and modifies tests if necessary. Provides reports on progress, anomalies, risks and issues associated with the overall project. Reports on system quality and collects metrics on test cases. Provides specialist advice to support others</p>
Business Change	Level 4	
Business Change Management	BPTS	<p>Business Process Testing (BPTS) - Specifies and develops test scenarios to test that new/updated processes deliver improved ways of working for the end user at the same time as delivering efficiencies and planned business benefits. Records and analyses test results, and reports any unexpected or unsatisfactory outcomes. Uses test plans and outcomes to specify user instructions.</p>