

Professional Position Description

Section I	Position Information	Update Only <input type="checkbox"/> Classification Review <input checked="" type="checkbox"/>
Position Title	Testing Specialist	
Position #	998670, 998671	
Department	Office of Digital Strategy, Information Technology	
Classification Level	B	
Reports to	Manager, DevSecOps	
Effective Date	March 12, 2021	
Position Summary Briefly describe the main purpose(s) of the position	<p>The Testing Specialist participates in the University's strategy for a secure DevSecOps infrastructure and is part of a team of Cloud Database Administrators, Developers, Systems Configuration Analysts and Testing Specialists in the DevSecOps team.</p> <p>This role provides technical testing capabilities in the planning, developing, testing, testing automation, and review of software quality, support of strategic, operational, or project-based objectives. The Testing Specialist ensures these activities are executed in accordance with the standard operating procedures of the IT Platform Engineering squad and in compliance with all IT policies and procedures to facilitate a secure DevSecOps approach and environment for all Athabasca University IT.</p> <p>This position is accountable for participating in DevSecOps monitoring and reporting capabilities to gauge the effectiveness of solutions and implements actions to address shortcomings with the guidance of the Manager, DevSecOps as needed in the technical squads in which the Testing Specialist participates.</p> <p>The Testing Specialist participates in optimizing the interdependencies between DevSecOps and Cloud Engineering functions through a collaborative to approach to continuous improvement. The Testing Specialist participates to improve the DevSecOps team productivity and delivery speed by helping all team members be self-sufficient and automating processes.</p>	
Duties and Responsibilities Organize by key responsibility area and include % of time spent where possible	<ul style="list-style-type: none"> • Participates in squads as assigned by the Manager, DevSecOps and share accountability with squad members in testing as related to implementation, improvements, decommissions, upgrades and maintenance of cloud-based applications and systems • Ensures security practices are implemented in all testing plans, workflows, and application testing. • Creates project specific test plans and strategies. • Responsible for continuously developing, documenting and reviewing a suite of functional and system tests for multiple systems. 	

	<ul style="list-style-type: none"> • Assists in the development and application of methods, procedures, and metrics to assist the development team in meeting their quality goals. • Documents and tracks software issues. • Contributes ideas and support the improvement and growth of AU’s Testing team and software development processes. • Maintains currency in best practices and processes related to DevSecOps • Maintains currency and assessing security and DevSecOps related standards, protocols, and emergent technologies • Manages work necessary to address problems in a timely manner and mitigating risks until resolved • Plans and supports effective test environments and modifies or creates test data within them. • Execute tests cases using black box and/or white box techniques, records results and runs regression tests after fixes. • Performs functional testing including system and integration tests, exploratory testing and load or stress testing where possible. Writes and executes automated test scripts where they provide value to the test process. • Overall responsibility for DevSecOps plans, user acceptance criteria, Statements of Work, and Work Breakdown Structures • Recommends DevSecOps tools and ensures adopted tools are being used effectively • Creates, maintains, and shares the necessary documentation to support solutions in keeping with AU’s IT Policies and Procedures • Participates in the DevSecOps team’s standardizations for change, validation, and deployment processes to reduce complexity • Provides technical mentoring and to accelerate learning across the DevSecOps team • Ability to work in an Agile/Scrum environment. Ability to deliver in sprints and work in a squad with a variety of technical roles • Ability towards learning new technologies. Continuously strives to learn new technologies and make time for self-development • Accountable for ensuring all time spent on projects and ongoing steady-state activities and initiatives are entered in AU IT time entry system.
Occupational Health and Safety	Responsible for awareness of one's OHS related responsibilities as an AU employee and for participating in the AU OHS Program as required
Classification Factors	
Communication	The Testing Specialist communicates in their role as a technical specialist with a broad set of stakeholders at all levels within the IT division as well as across the university.

	The nature of this position, and the related duties and responsibilities performed, require the incumbent of this position to uphold the utmost degree of confidentiality.
Supervision	May supervise summer students and interns
Impact of Service or Product	This position participates directly in AU's development, test, and production applications and systems in the AU cloud and partner clouds environment. Issues related to this access include the potential of disruption of access for all students and staff.
Independence of Action	This position works on assigned work in squads, projects and initiatives under the general guidance of the Manager, DevSecOps. In addition, the incumbent works from a prioritized list of tasks related to tickets generated by the Technical Service Call Centre. They are expected to respond immediately to major events which interrupt the delivery of IT services to the AU user community.
Complexity	<p>This position requires a wide set of skills to support AU's DevSecOps applications and systems, including full lifecycle deployment of solutions, security rules, multiple cloud vendor solutions, cross-university integrated solutions with multiple dependencies and support of large audiences in terms of usage of systems.</p> <p>The incumbent must be an adept problem solver in order to develop effective solutions. The incumbent must be comfortable with root cause analysis; identifying or narrowing down the underlying source of an error.</p>
Planning	Work involves the participation in squad assignments and Technical Service Desk Level 3 tickets as assigned by the Manager, DevSecOps. Impacts of the activities and coordination between systems, projects and staff resources on meeting budget and timeline constraints of key AU programs and initiatives must be considered.

Signatures for Section I

Incumbent's Signature _____

Date _____

Supervisor's Signature _____

Date _____

**Section II
Qualifications**

Includes education, experience, skills, abilities and any other special qualifications required. The qualifications relate to the position not the incumbent

- Associate-level AWS Developer or Solutions Architect certification required
- Minimum of 5 years work experience as a Testing Specialist required and in a cloud-based environment preferred.
- Experience with functional testing, black and white box techniques, and integration testing, compatibility, acceptance, performance, load and/or integration testing.
- Degree or diploma in business, communication, project management, information technology. In lieu of a degree or diploma, additional experience over and above the minimum requirement may be considered.
- Experience with the implementation of partial automation of repetitive testing tasks.
- Experience with load testing and stress testing.
- Familiar with Context Driven test techniques and Exploratory Testing.
- Additional AWS certifications preferred
- Excellent negotiating and interpersonal relations
- Programming experience in current programming environments and relational database systems analysis and design, PHP, Java, Python, JavaScript preferred
- Proven ability to thoroughly and logically analyze systems applications, by utilizing both deductive and intuitive reasoning to recognize potential problem areas within a system, and to predict the ramifications of alternate solutions.
- Scripting skills, i.e., Powershell, Python, Bash, Ruby, Perl, etc. preferred
- Applied understanding of Service-Oriented Architectures (SOA and REST)
- Applied understanding of application and infrastructure logs
- Applied experience with various DevSecOps tools including Qualys, Fortify, or OWASP
- Excellent problem solving and critical thinking abilities
- A sound understanding of information technology and how it can be used to support the delivery of business solutions
- Able to develop relationships, communicate, engage, and influence at all levels
- Highly self-motivated and self-directed
- Ability to effectively prioritize and execute tasks in a high-pressure environment

Signatures for Sections I and II

Department Head Signature _____ Date _____

Executive Officer Signature _____ Date _____

Human Resources Review _____ Date _____