PEA Job Description

1. Position Identification

<table>
<thead>
<tr>
<th>Position Number:</th>
<th>991775, 994117, 994418</th>
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<tbody>
<tr>
<td>Position Title:</td>
<td>DevSecOps Engineer</td>
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<tr>
<td>Department:</td>
<td>UNEX</td>
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<tr>
<td>Reports to:</td>
<td>IT Director, Continuing Studies</td>
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<tr>
<td>Number of Reports:</td>
<td>Direct: 0, Indirect: &lt;=10</td>
</tr>
<tr>
<td>Classification Level:</td>
<td>SG11</td>
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<td>Last Updated:</td>
<td>August 2019</td>
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2. Position Summary

The Division of Continuing Studies (UVCS) at the University of Victoria (UVic) leverages their independent IT Unit (ITS) to ensure technology is optimally utilized for non-credit learners on campus. Technology within UVCS is deployed to support a custom developed student information system (SIS) that encompasses multiple applications that together form our overall Enterprise System. This end-to-end, full-stack, Enterprise system extends from administrative, lab, and classroom computers, through server and database systems, culminating with integrations into Learning Management Systems (LMS), Content Management Systems (CMS), and other supporting web-apps, not only at UVic, but also at other like-minded educational institutions.

Reporting to the IT Director, the DevSecOps Engineer is expected to support the transformation of people, process, and automation within UVCS. They are responsible for maintaining and improving the Enterprise System that is the backbone of the student learning experience at UVCS. This position requires expertise in technical systems, agile project management, software development, and customer service.

As a technical leader, this role supports DevOps through automation and CI/CD, produces software code, manages information and system security, participates in both software development and infrastructure projects, provides user support and incident triage with a client centric focus.

Other related duties may be assigned throughout the year. This position is expected to be an effective team member while reliably completing required tasks and assigned projects independently. There are occasional requirements to be available outside of normal working hours and to be able to lift and carry computer equipment.
### 3. Key Responsibilities and Expectations

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<th>Key Responsibilities</th>
<th>Expectations:</th>
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| **50% Development**  | - Perform ongoing Business Analysis (BA) work in order to provide recommendations and create technical specifications to ensure all code created delivers expected value at optimal risk/cost.  
- Collaboratively analyze, plan, implement, integrate, test, and deploy system enhancements and complex reports.  
- Conduct user acceptance testing (UAT) against established use-cases.  
- Facilitate Business Intelligence (BI) through data analysis, reporting, and dashboards.  
- Recommends and implements technology and configuration upgrades and conversions |
| **30% Operations**    | - Perform required upgrades to various 3rd party applications that comprise the overall Enterprise System which includes operating systems, web applications, and databases.  
- “Swarm” to resolve issues that arise from the daily use of the Enterprise System within agreed service levels and/or release schedules.  
- Monitor the Service Desk to ensure there is no back-log of service requests.  
- Contact and consult with other technical staff where appropriate.  
- Assist Students and Instructors with the use of technology  
- Communicates technical concepts to a non-technical audience to achieve consensus on changes to applications and project goals |
| **10% Technical Leadership** | - Participate in software development and infrastructure projects using both SCRUM and “waterfall” processes.  
- Ensure coding standards and all relevant policies are followed.  
- Ensure change/release practices are efficient and adhered to.  
- Focus on Security awareness to ensure all code generated is inherently secure as it is produced.  
- Cross Train other members of the ITS Team and function as a subject matter expert in working groups.  
- Ensure client requirements and priorities are understood and met throughout the life cycle of the development project |
| **10% Continuous Improvement** | - Review incidents for root-cause problem resolution and recommend changes.  
- Improve “IT best practices” with a focus on process automation.  
- Provide indepth technical advice and training to Clients on the use of the Enterprise System.  
- Provide advice to managers and team members on alternative solutions through industry research and new product evaluation, including risk assessment of existing and future applications.  
- Keep abreast of trends in the Industry while seeking and maintaining training certifications.  
- Maintain technical documentation. |
4. Classification Factors:

**Problem-Solving:**
Requires in-depth analysis of complex and variable problems as well as critical thinking and judgement to identify unique solutions for the non-credit learning-environment and international students who have come here to learn English. If there is an interruption or degradation in the Enterprise System, this position must be able to determine the root cause and take corrective action. This position uses expert knowledge to identify, design, and develop technology based solutions to business problems, making recommendations on the use of new or existing technologies within several subject areas. Analyzes existing business processes and recommends improvements. Analyses historic data to identify trends and opportunities. Reviews pervasive technical issues and ongoing problems for solutions, not work-arounds. Explores cross-platform capabilities to ensure maximum benefit/performance.

**Responsibility for Financial & Material resources:**
Recommends purchases requiring detailed specifications. Has shared responsibility for supporting the Division’s approximate 20,000 students annually in classrooms and labs, with over 300 desktops/laptops, and an Enterprise System comprised of roughly 50 servers hosting several applications. Contributes to the identification of IT solutions.

**Responsibility for Human Resources:**
Provides ongoing operational or technical support and training to others, including students with limited English. Guidance and direction includes the use of operating systems, applications, and computing equipment including mobile phones and AV gear. Supervision = informal/direct/shared responsibility for coops, averaging 2+ semester. Project Oversight = few annually, averaging 1 month in duration each, with teams up to 10.

**Impact of Decisions and Actions:**
Individual actions and decisions have a major impact on the objectives and/or results of specific projects, programs, or services within the department. Collaborative involvement in decision-making has a moderate impact beyond our Division since the System is used by other Institutions which provide the Revenue required to support the Unit. The applications and systems supported are diverse and numerous, supporting all teaching, learning, and administration objectives. The actions of this position directly impact the ability of UVCS to register and teach roughly 20,000 students each year. The position also makes recommendations for modifications to business processes, leveraging technologies and efficiencies that may be available, when designing solutions, having an impact across this university and others.

**Independence:**
Work is performed in accordance with practices, procedures and policies, but considerable latitude is exercised in selecting work methods. Objectives are set by the person performing the job on the basis of direction received from managers and an assessment of the needs of service users. Work is reviewed for effectiveness upon completion of projects or major phases of projects. Informed guidance is available if required.
5. Summary of Qualifications:

This position requires a Bachelor’s degree in a Computer Science or other relevant discipline and at least 3 years of related experience, including:

- Modern programming languages and frameworks
- Software testing procedures and frameworks
- Secure coding practices and frameworks
- Modern technical architectures and configuration

Equivalent combinations of education and experience may be considered.

- Supporting and maintaining enterprise scale software
- PMP/CSM and/or MCSD/MCSE

Specialized knowledge requirements include:

- Web related coding experience such as C#, ASP.NET, HTML5, and JS.
- Use of Ticketing and Version Control tools like TFS/JIRA and SVN/Git

The following experience would be beneficial:

- Microsoft.NET Framework including Visual Studio
- CMS technologies, like N2 or Cascade
- LMS technologies, like Moodle or D2L
- Database Systems like SQL Server and Oracle (including LDAP)
- Desktop, Server, and Network architectures and related operating systems
- Backup and imaging technologies and DR/BCP processes
- Microsoft DNS, Active Directory, and Group Policy management
- Ellucian Banner/College and related products
- Business Analytics tools such as Crystal Reports, Tableau and PowerBI
- Application Performance Management Tools and automated Testing suites
- Understanding of Business Analysis and Agile Project Management
- PCI and other Security scanning and compliance tools
- A general understanding of Privacy issues as they relate to FIPPA
- ITIL, COBIT, SCRUM frameworks

In addition, this position requires:

- Service Orientation, with excellent interpersonal and communication skills (written and oral), and ability to conduct presentations to groups.
- Ability to successfully contribute to complex projects and meet deadlines
- Ability and desire to continually learn and acquire new skills
- Ability to problem solve effectively
- Ability to write coherent technical documentation for end-users
- Self-motivation, initiative, and willingness to participate in team activities

Employee’s Signature:  
Date:

Manager’s/Supervisor’s Signature  
Date: