

JOB DESCRIPTION**Dept.:** Information & Educational Technology,
Applications Services**Working Title:** Programmer/ Analyst (215, 216, 217, 218,
219, 220, 300)**Date:** March 1998**Job Class:** 14 (with Stipend)**PRIMARY FUNCTION:**

To provide programming and technical support to develop, maintain, administer and enhance Kwantlen Polytechnic University's information and education systems.

JOB DUTIES AND TASKS:

1. Analyze user requests and conduct business and procedure analysis:
 - a. Consult with and advise clients on their operational and information needs.
 - b. Determine and document client business requirements.
 - c. Provide clients with alternative design solutions and cost estimates on software/hardware and resources.
 - d. Design and develop appropriate computerized technical or procedural solutions to meet client needs.
 - e. Design, develop and document technical design specifications.
 - f. Develop, test and implement new applications and enhancement to existing applications, according to design specifications.
 - g. Prepare and maintain appropriate system and user documentation.
 - h. Train and assist users during the test and implementation phases of application development.
 - i. Provide ongoing application support, including problem resolution and emergency maintenance when required.
2. Perform database administration:
 - a. Perform installation, backup/recovery and upgrades of databases.
 - b. Monitor performance and space utilization of databases, troubleshoot and tune databases when required.
 - c. Design and implement security controls.
3. Perform other related duties:
 - a. Train user support staff members in application troubleshooting techniques.
 - b. Conduct training/information sessions on application systems and software technologies.
 - c. Participate in development projects or troubleshooting sessions as necessary.
 - d. Participate in planning software maintenance releases.
 - e. Evaluate hardware and software tools.
 - f. Contribute to the development of technical standards, guidelines and procedures.
 - g. Communicate with contractors and software vendors as required.
 - h. Assign, monitor and direct other workers.

SUPERVISION RECEIVED:

Reports to Manager, Enterprise Systems Architecture.

SUPERVISION/DIRECTION EXERCISED:

Assign, monitor and direct the work of others.

PHYSICAL ASSETS/INFORMATION MANAGEMENT:

Develop, enhance and maintain information and education systems; manage the integrity, maintenance, access and security of information system databases.

FINANCIAL RESOURCES:

Provide cost estimates of software/hardware and resources in application development projects; select and recommend purchase of software, related document and training materials; sign for and verify receipt of purchases.

The above statement reflects the general details considered necessary to describe and evaluate the principal functions of the job identified, and shall not be construed as a detailed description of all the work requirements that may be inherent in the job.

EMPLOYER REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

EDUCATION AND EXPERIENCE

- Completion of a college or university degree in computing studies or a related field.
- Minimum 6 years' experience in Information Technology environment, which includes 3 years of direct experience in enterprise architecture conception and 1-year recent related experience in supporting the Ellucian BANNER Post-Secondary Enterprise architecture is preferred. An equivalent combination of education, training and experience will be considered.
- Experience working with Active Directory, Open LDAP, Single Sign On solutions, SSPR and provisioning of identities to IdP.
- A Microsoft certification in either Azure Fundamentals or Identity and Access Administrator Associate is required (or applicable experience).

QUALIFICATIONS

- Progressive technical knowledge and knowledge of best practices in information technology service delivery such as Agile Software Development Life Cycle and ITIL.
- Knowledge of sign-on methodologies (such as CAS, SAML and Shibboleth).
- Experience with IT infrastructure like Active Directory and VMWare in order to understand existing and new architecture with enterprise applications. Installation and Configuration experience working with operating platforms such as Windows Server 2016/2019 and Linux RedHat.
- Direct experience working with a broad base of products, technologies, platforms, patterns, frameworks, and methodologies. This would include:
 - o Programming languages may include: SQL, PL/SQL, T-SQL, C/C++, Java, Perl, PHP, Shell scripting, AWK, and PowerShell.
 - o Web languages may include: HTML, HTML5, CSS, JavaScript (jQuery), C#, Visual Studio, groovy and rails, NET stack, etc.
 - o Databases may include: Oracle, MS SQL, MySQL, Postgre, etc.
 - o Operating platforms may include: Windows, Linux, and UNIX.
- Detailed knowledge of Microsoft SharePoint 2012-2019 back end architecture, with experience in maintaining, configuring, installing and upgrading.
- Strong grasp of PowerShell as a scripting tool to automate administrative tasks.
- SQL Server Database support and administration experience is preferred.
- Ability to configure, tune and maintain IIS, Apache, Tomcat and RHEL servers.
- Ability to gather, understand business requirements and translate into high-level requirement documents for the system integration.
- Knowledge of modern infrastructures such as storage area networks, virtualization, high availability design, operating systems, network architecture, enterprise network management systems, etc.
- High level of proficiency and experience in cloud application technologies, and transitioning on-site applications to the cloud in a higher education environment.
- Ability to recognize problems or situations that are new or without clear precedent.
- Ability to find solutions using a systematic, multi-step approach for developing improvements and innovations to enhance performance.
- Ability to work proactively with minimal supervision, under own initiative.
- Good verbal and written communication skills, and well-developed leadership skills.
- Must be willing to work a flexible schedule including occasional evenings and weekends.

Knowledge Skills & Abilities revised: July 2023
