# Job Description

| | |
|---|---|
| **Job Title:** | Information Systems Developer |
| **Department:** | Dean of Science, Computing |
| **Reports To**: | Director, Information Technology |
| **Jobs Reporting:** | None |
| **Salary Grade:** | USG 8 |
| **Effective Date:** | April 2018 |

## Primary Purpose

The Information Systems Developer (IS Developer) is responsible for the design, development and support of application based information technology solutions and related computing systems in the Faculty of Science. Responsibilities include all aspects of the technical infrastructure supporting these applications' life cycle that include network/operating system, databases, programming languages, and delivery methods (client/server, web) that enable and improve outcomes for teaching, research, and administrative computing in the Faculty.

## Key Accountabilities

**Consulting, design, development and support services**

- Conduct business analysis of existing processes through consultations with stakeholders, recognizing that there may be incomplete, ambiguous, and even contradictory requirements
- Creation of models, data schemas and business rules resulting in improvements to efficiency, outcomes, and workflow in new or established business processes.
- Construction/Implementation of the software using modern development methodologies, tools, languages and APIs.
- Testing and verification to ensure that defects are recognized as soon as possible. Various methodologies may be employed depending on the specific testing objectives and location in the software's development cycle.
- Deployment of software into a production environment that may require further customization and testing and possibly extend the period of evaluation.
- Maintenance and enhancing of software to cope with newly discovered faults or requirements
- Project planning and assignment of tasks and supervision of work for staff dedicated to development projects.

**Client service and technical support**

- Recommends appropriate software for use in a specific application, outlining the pros and cons with respect to the intended user environment and needs.
- Supports users with various technical needs, such as: assisting with client work stations and use of desktop systems
- Administers servers, databases, and other tools as required

**Solve a wide range of problems creatively and effectively.**

- Employ general principals to understand and solve problems.
- Apply experience and judgement to explore possibilities, recognizing preferred approaches and solutions. Identify circumstances when standard approaches to problem solving are practical as well as those requiring creative thinking and ingenuity.
- Use a disciplined approach to all aspects of problem resolution.

- Adopt an abstract approach to problem solutions, to be able to choose and create general, scalable, standards-based solution to problems where possible. Seek solutions which can be applied to benefit large problem areas or client bases, extending to the entire campus where possible.

**Obtain and maintain technical knowledge**

- Through practical experience and professional development, keep abreast of current computing-related technology as it relates to currently used system configurations, technology and applications used within the University, and potential acquisitions related to client needs.

## Required Qualifications

**Education**

- A university degree in a computing discipline, or equivalent combination of education and experience.

**Experience**

- One year of experience in an information systems development role including demonstrated exposure to the full systems development life cycle

**Knowledge/Skills/Abilities**

- Knowledge of information systems from functional and technical perspectives which may include (but is not limited to) development tools and utilities, database management, desktop applications and web development, systems analysis and design, systems development and support methodologies, and project management.
- Proficiency with tools and languages utilized to build, implement, and support these information systems.
- Strong client service skills and demonstrated ability to work as part of a team.
- Ability to apply abstract thinking to solve technical problems.
- Ability to work with a minimum of supervision.
- Good organizational, time management and communications skills.
- Ability to learn quickly and adapt to change.

## Nature and Scope

- **Contacts:** Significant relationships include other members of the department; IT staff across the University in individual and group contexts; staff, faculty, students, visitors associated with the Faculty of Science; technology specialists at other institutions and organizations; and technology vendors.
- **Level of Responsibility:** This position provides technical services and is responsible for solving technical problems and making recommendations as applicable but will escalate complex issues to senior staff as they arise.
- **Decision-Making Authority:** Make recommendations on all aspects of development projects including specific stakeholder requirements and the scheduling of development work within the Faculty
- **Physical and Sensory Demands**: Depending on specific responsibilities and Faculty/department needs, there may be a need to lift and manipulate computing equipment, typically workstation class equipment up to 20 kg but occasionally servers and large printers.
- **Working Environment:** Most work takes place in private offices in front of a computer workstation. Travel to staff and faculty offices in the Faculty is occasionally required. Hours of work are similar to standard office hours, with some flexibility in scheduling and the occasional requirement for work to be done outside of office hours for emergency situations or to minimize disruptions to clients. The position requires balancing of competing demands of short and long-term projects, periodic interruptions when engaged in focused work, and the awareness that any errors may damage large number of computing systems and/or affect the ability of clients and peers throughout the Faculty and in some cases the entire University to accomplish their jobs.