

Job Description

Job Title:	Information Systems Specialist (Development and Operations)
Department:	Dean of Science, Computing
Reports To:	Director, Information Technology
Jobs Reporting:	None
Salary Grade:	USG 13
Effective Date:	September 2023

Primary Purpose

The Information Systems Specialist (IS Specialist - Development and Operations) is responsible for the design, development and support of applications-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

Provide consulting, design, development, and support services

- Creation of models, data schemas and business rules resulting in improvements to efficiency, outcomes, and work-flow in new or established business processes
- Construction/Implementation of software using modern development methodologies, tools, languages, and APIs

Manages the Effective Consulting, Design, Development, and Support Services for Science Software Projects/Initiatives

- Conduct business analysis of existing processes through consultations with stakeholders, recognizing that there may be incomplete, ambiguous, and even contradictory requirements
- Adopt an abstract approach to problem solutions, to choose and create general, scalable, standards-based solutions to problems that should benefit large problem areas, extending to the entire campus where possible
- Manage all aspects of project scope, schedule, resources and risks for assigned projects
- Appropriately delegate and allocate work among staff members to ensure timely completion of projects and initiatives aligned with committed objectives
- Manage documents and change control processes, identifying areas of improvement of these functions
- In collaboration with management, participate in and anticipate the standardization and improvement of Science business processes to simplify and enhance overall service delivery
- Maintain knowledge and expertise in project management disciplines as well as multiple business processes and technical systems
- Leverage industry best practices to plan, manage, monitor and report on all projects

Responsible for Planning, Execution and Monitoring of Software Development Projects

- Lead software development projects; including recommendations, prioritization and impacts, resource needs, creating implementation plans, and managing communications and documentation.
- Developing project scopes and objectives involving all relevant stakeholders and ensuring technical feasibility of the project

Job Description



- Create and maintain project schedules and provide updates for project managers and sponsors.
- Manage work and information flow between project participants
- Perform risk management to minimize project risk

Build and maintain strong interpersonal relationships and gain consensus with all internal and external stakeholders

- Facilitate the resolution of conflict that could arrive due to software/hardware issues, inadequate status reporting, disagreements on progress to date or miscommunications
- Projects will often have significant impacts outside the faculty and for the entire university community. The incumbent is expected to work with and influence outside stakeholders
- Participate in campus wide committees ensuring broader campus needs are understood as part of the analysis process
- Ensures that the time used for collaboration with stakeholder adds significant value to projects

Ensures the effective utilization and deployment of computing infrastructure

- Manage computing infrastructure and related software development projects using best practices to achieve successful outcomes.
- Recommend enhancements and improvements to systems and processes; provide guidance on technological evolution.

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- University undergraduate degree in a computing discipline; or equivalent combination of education and experience is required

Experience

- 7-10 years' progressive experience with development of software-based business solutions, project management and process improvement initiatives
- 2-3 years' experience with mentoring and training junior staff or co-op students

Knowledge/Skills/Abilities

- Excellent analytical and problem-solving skills are essential
- Proven ability to understand complex situations, tasks or problems, analyze them using a systematic approach and identify patterns and connections between situations that are not inherently obvious
- Proven ability to adapt and work effectively within a variety of situations including changes in job demands; changing priorities or competing priorities
- Demonstrated ability to engage and influence senior stakeholders ensuring stakeholder adoption
- Knowledge of and experience with continuous improvement methodologies
- Ability to convert business opportunities to innovative business solutions and translate strategy into breakthrough processes and technologies
- Excellent skills in negotiating and persuasion to build cooperation and expedite projects.
- Highly skilled at developing, advising and directing others with their professional development

Nature and Scope

Job Description



- **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 and technology vendors
- **Level of Responsibility:** This position provides day to day management of software development projects and related computing infrastructure. The role is required to lead projects specific to software development and process improvement and provide resources as needed to the faculty. The position ensures that all development processes are effective and efficient and that all projects are delivered on time, on budget and within scope
- **Decision-Making Authority:** Make decisions and recommendations on all aspects of software development projects including specific stakeholder requirements and the scheduling of development work within the faculty
- **Physical and Sensory Demands:** : Requires high attention to detail and must handle distractions, changing priorities and interruptions, while meeting required deadlines
- **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.