Generic Position Overview

**Family:** Information Technology

**Branch:** Systems/Technical

**Cluster:** ITST8

Note: Employees of Queen’s University work in a challenging and diverse environment. Queen's is committed to encouraging the development of new skills and attributes in its workforce. It is critical that staff are able to adapt to a changing work environment and to acquire new skills as these become necessary.

Depending upon the size of the department or unit and its functional activities, incumbents who fall into this category may perform all of the duties listed below or, in the case of large departments or units, may be assigned to designated specialized functions.

**Generic Position Summary:** Coordinate and implement the planning, development, installation and support of data management systems. Design, code, test and debug programs or application software at all levels of complexity. Analyse and revise existing system logic difficulties as necessary. Document all program changes. Recommend, assist, or undertake the planning, design, implementation, and programming of systems and software tools. Provide technical support and services to units or departments. Assist with the identification and resolution of complex database design and maintenance problems. Provide technical support and consultation for a variety of systems and information search and retrieval systems. Develop and maintain support vehicles such as courses, seminars and documentation.

**Primary Duties And Responsibilities:** Design, code, test and debug programs or application software. Analyse and revise existing system logic difficulties as necessary, modify procedures and document all program changes.

Coordinate and implement the planning, development, installation, and support of data management systems. Program new systems by analysing, designing, managing and implementing the required changes. Provide ongoing support and maintenance.

Provide technical support and services to units or departments. Assist with the identification and resolution of complex database design and maintenance problems. Provide technical support and consultation for a variety of systems and information search and retrieval systems. Provide support to the database management systems, data warehouse and/or mainframe databases.
Provide a range of consulting and problem solving services to individuals, units or departments. Diagnose and correct or resolve micro-computer (both hardware and software) problems. Assume full responsibility for each problem report call from start to finish and resolve most problems on-site. Refer more complicated hardware problems for repair.

May supervise staff and coordinate workflow. Delegate tasks and determine priorities as necessary.

Assist with the development and teaching of computer-related courses/seminars. Prepare training documentation.

Provide round the clock crash maintenance and technical support for production systems. Ensure that system security, backup, and recovery mechanisms are operational.

Undertake other duties as required in support of the unit or department.

**Required Background:** Three-year post-secondary program in computer science or related area with substantial relevant experience, or a university degree in a related area with several years of experience. Specific training in areas such as telecommunications may be required. Knowledge of distributed database systems. Proven experience in programming, analysis and/or database design. Additional specialized training may be required depending upon the position. Demonstrated technical proficiency. Supervisory experience may be needed in some positions. Consideration will be given to an equivalent combination of education and experience.

**Special Skills:** Typical skills that *may* be required in the performance of job duties include:

- Demonstrated technical knowledge of administrative mainframe, PC workstations and databases.
- Well developed programming skills.
- Very strong analytical and problem solving/troubleshooting skills in order to understand problems or assist in systems design/development.
- Understanding of electronics pertaining to micro-computers and associated peripherals in order to diagnose problems.
- Software development skills are necessary to correctly design and implement new systems.
- Knowledge of various university information systems and its policies and procedures. Familiar with a wide range of computing and communications technology, with expertise in certain areas depending on the position.
- Interpersonal and communication skills (both verbal and written) in order to
interact with both technical and non-technical staff and clients at all levels.

Experience working in a client-service, team-based environment.

Supervisory or leadership skills in order to motivate junior staff and create a positive work environment. Sensitivity to issues affecting performance of staff.

Organizational and coordination skills in order to coordinate the workflow of the department.

Strong reading and writing skills needed for the documentation of system and application software.

Effective time management skills in order to handle a broad range of responsibilities and frequent interruptions.

**Decision Making:** Examples of the types of decisions regularly made on the job:

Determine appropriate action to take when a system fails outside of normal working hours.

Determine how best to meet the department or unit needs for computers and information management systems.

Determine appropriate problem-solving procedures and decide how to best rectify the problem. Decide if a problem should be referred to others.

Allocate time, prioritize tasks and determine work flow. Continually assess and adjust priorities and manage tasks in a fast-paced and demanding environment.

Ability to evaluate and make recommendations such as the purchase of new systems, peripherals and software.

Determine content of training courses/seminars and documentation in order to best meet the user's needs.

**Supervisory Responsibilities:** May be supervisory duties in some positions. May delegate work, conduct performance appraisals, recommend for hire/fire and discipline.

*Last update: December, 1999*