Job Description

<table>
<thead>
<tr>
<th><strong>Job Title:</strong></th>
<th>Information Systems Manager (4105)</th>
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<tr>
<td><strong>Department:</strong></td>
<td>Centre for Education in Mathematics and Computing (CEMC)</td>
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<td><strong>Reports To:</strong></td>
<td>Administrative Officer, CEMC (5614)</td>
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<td><strong>Jobs Reporting:</strong></td>
<td>Information Systems Developer (5619), Project Coordinator (1630)</td>
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<td><strong>Salary Grade:</strong></td>
<td>USG 11</td>
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<td><strong>Effective Date:</strong></td>
<td>April 1, 2019</td>
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**Primary Purpose**
This position has two direct reports and is responsible for IT management for several different groups both internal and external to the University of Waterloo. Internal support is provided to CEMC computer system group members, CEMC faculty and staff, 8-10 co-op students each year. External support is provided to our 8,000 Canadian and International school customers and the hundreds of students and teachers who attend CEMC workshops and seminars each year.

**Key Accountabilities**

**Systems Design and Code Development**

- Buy, Make or Subcontract decisions for updates to the CEMC system framework: contest marking system, credit card report integration, web site audio streaming, web site maintenance, maintain Sharepoint service, HST implementation, remote connections to desktop machines
- Testing including automated test suites for 4 servers, unit and system test plans, testing interfaces for internal UW systems and external systems (Bambora, Go-Logix, etc.)
- Documentation using JavaDoc is generated from preformatted comments in source code: training and user manuals are maintained on the CEMC Sharepoint site; training documents for external user groups are maintained on the CEMC website. Example: school zone naming conventions, LAMP Server setup guides, CEMC systems configurations, Agile shipping group conventions, etc.
- Documents for developers and user groups are maintained in Java Doc, on the Sharepoint site and on the CEMC website
- Communication: CEMC has many different customers/clients with various requirements. Each audience has different technological backgrounds and range understanding. The right explanation of technical issues is critical
- Working relationships: requires an understanding of what the CEMC does and how it interacts with its different customers and clients. Customers, including schools, teachers, students, and parents purchase mathematics contests, attend CEMC events and access our web-based resources. The CEMC is the outreach arm of the Faculty of Mathematics and is often the first contact prospective students have with the University of Waterloo

**Time management and organization**
- Managing the varied and overlapping annual calendar of CEMC events during the September to June school year and managing the various project activity during the summer months. Has “ownership” of all projects
- Prioritize activities based on deadlines and resource availability
- Schedule completion dates and milestones; review weekly/monthly progress reports
- Work within the time constraints of other departments (Finance, Central Stores, etc.) when engaged with interdepartmental, cross-team projects
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- Develop and manage the CEMC computer hardware rollover plan for new hardware purchases

Technical Support
- Distributes and manages support tasks for large projects
- Provides managerial role for junior support staff and co-op students
- Training, refinement and redesign of systems based on end-user requests is provided
- Training is provided as stated in ‘Communication’ point above
- End-user requests are reviewed and services provided according to the results of review
- The incumbent is the prime contact person for MFCF related issues and subsequent discussion
- System related requests are designed/created

Client Service
- Establish appropriate policies and procedures to minimize customer complaints
- Resolves customer complaints if not handled effectively by junior staff
- Establish mechanisms to help junior level information system reports to minimize future modifications to systems

Staff Management
- Hires, manages, and evaluates the personnel who report to him/her, including the management of interview committees, the selection of outstanding candidates, salary negotiations, and any performance management necessary
- For all staff who report to him/her, leads collaborative projects, sets clear and reasonable expectations, provides ongoing feedback, ensures the delivery of results, and establishes a strong foundation for performance through a comprehensive training program
- Creates and maintains a work environment that fosters, recognizes, and rewards supportive mentorship, professional quality, respectful communication, creativity, positive energy, and synergy.

*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
- Master's Degree and/or relevant experience required
- Microsoft Certified System Engineer
- Oracle Certified Professional
- PMI certified PMP

Experience
- 5 – 10 years’ experience in IT
- Experience managing large projects

Knowledge/Skills/Abilities
- Must be able to convey an overview of the entire technological philosophy, including hardware
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and software choices made
- Provide advice for integrating entire CEMC software and hardware requirements ensuring ongoing compatibility
- Evaluate pros/cons of various possible hardware systems and O/S combinations in the CEMC
- Make decisions about hardware and operating system requirements: evaluate models, products and versions.

Nature and Scope
- **Contacts:** Internal: Present, discuss information and problems; mentoring and coaching; manage and provide direction to junior IT staff and co-op students. **External:** Present, discuss information and problems; main contact for technical issues related to MFCF, IST, suppliers, etc.
- **Level of Responsibility:** The job includes responsibility for oversight of all IT related systems and initiatives in the CEMC; management of direct reports, casual or temporary staff; checks milestone and project status; overall job monitoring.
- **Decision-Making Authority:** Makes decisions about the assignment of project work to junior IT staff and co-op students. Recommends hardware and software purchases to ensure compatibility with existing systems. Implements the overall CEMC IT plan with input from the Director.
- **Physical and Sensory Demands:** Minimal demands typical of an administrative position within an office environment. Occasional lifting, carrying, stretching, and reaching when dealing with hardware placement and set up.
- **Working Environment:** Occasional travel required. Regular working hours, some evening/weekend work required. No significant physical risks. Minimal exposure to disagreeable conditions typical of a management/supervisory position.