CAAT Job Evaluation System for Non-Bargaining Unit Employees

Ontario Colleges of Applied Arts and Technology

The Job Fact Sheet Questionnaire (JFS) is used to gather information for job evaluation purposes for the Colleges' Administrative Staff, Part-Time Support Staff, Part-Time and Sessional Academic Staff positions. Please read each section carefully before completing.

The Education and Experience sections are to be completed by the College according to the College's recruitment standards.

Upon completion by an incumbent, the JFS is reviewed and, when necessary, adjusted by the position's Manager and the Senior Manager responsible for the position. Any changes to the JFS are to be reviewed with the incumbent prior to evaluation. The JFS is then submitted to the appropriate College official for job evaluation purposes.

The JFS is not finalized until it has gone through the job evaluation process and the results have been confirmed by the College. A copy of the finalized JFS will be provided the incumbent for information purposes and as a job description.

POSITION IDENTIFICATION

DATE: April 15, 2019 Updated: December 6[,] 2021

| College: | St. Lawrence | | |
|---|--|--|--|
| Incumbent: | Vacant | | |
| Position Title: | IT Systems Architect & Administrator, Applications | | |
| Division/Department: Classification: Position #: NOC Code: Location/Campus: Immediate Supervisor (title): Type of Position: | Information Technology Services Payband 10 New 0213 Kingston Associate Director, IT Systems Applications, Infrastructure & Networks | | |
| Administrative | □□ □ Part-Time Administrative | | |
| Sessional Academic | Part-Time Academic | | |
| Part-Time Support | | | |
| I have read and understood the | e contents of the Job Fact Sheet (if completed by an incumbent): | | |
| Incumbent: | Date: | | |
| Recommended by Position's Manager: | Date: | | |
| Approved by Senior Manager: | Date: | | |

POSITION SUMMARY

Provide a concise description of the position by identifying its most significant responsibilities and/or accountabilities.

The area of focus for the **IT Systems Architect & Administrator, Applications** is the IT applications aspects of IT Systems. An expert level knowledge and depth of experience in the field of IT Applications is required. This role is responsible for the application of their expert knowledge to ensure successful operation of IT systems and services. This position is responsible for providing leadership in the areas of **IT Systems Applications** architecture, operations, support, and project technical tasks.

The IT Systems Architect & Administrator, Applications is accountable for effectively architecting and managing the technical aspects of the college's IT Systems Applications systems. Using advanced technical skills in the enterprise IT systems domain, this role takes proactive steps to design and implement improvements to IT systems, applications, and infrastructure in order to improve value delivery and avoid service disruptions or performance degradations. This position is accountable for resolving support issues related to operations of the IT systems and is the primary role responsible for coordinating resolution of the issues. This position is the primary point of contact for technical support with application vendors and IT systems providers and is responsible for managing communication between these providers and the extended ITS team during issue resolution. As part of the ITS team this position is called upon to provide backup coverage for others in the team. Frequently it is necessary to work outside of regular working hours to resolve critical operational and support issues or to perform project tasks as deemed necessary by the **Associate Director, IT Systems Applications, Infrastructure & Networks**.

KEY DUTIES

Provide a description of the position's key duties. Estimate the percentage of time spent on each duty (to the nearest 5%). Add an extra page if necessary.

KEY DUTIES

% OF TIME

(20%)

1. IT Systems Applications: Architect IT Solutions

- In collaboration with the Associate Directors for IT Systems, and the other IT Systems Architect and Administrators:
 - Gather requirements from stakeholders for IT solutions
 - Document and prioritize the requirements for IT solutions collaboratively with the stakeholders and IT department team members
 - Perform analysis of IT solutions alternatives and identify how they satisfy the identified requirements
 - Report on the analysis of alternative IT solutions demonstrating the advantages and disadvantages of the various solutions considered including aspects related to value delivery, risk, architectural fit, technical fit, cost effectiveness and efficiency
 - Perform detailed design activities related to the chosen IT solution in order to produce design specifications, procurement plans, implementation plans and detailed task lists
- Ensure that effective application security controls are integrated into new solution designs
- Assess the architecture of existing IT Systems Applications for application security gaps and vulnerabilities
- Contribute to the development of the overall IT Systems Applications architecture, standards, procedures and policies

2. IT Systems Applications: Perform Operational Administration

(20%)

- In collaboration with the Associate Directors for IT Systems, and the other IT Systems Architect and Administrators:
 - Plan, install, configure and document the installation and configuration of all IT systems and integration between systems
 - Monitor and proactively manage IT systems performance, security, information integrity, and related changes
 - Manage, develop and maintain IT systems technical operations documentation, standards, conventions, and procedures
 - Coordinate implementation of minor IT systems updates, and patches as required in order to maintain operational continuity, with major updates and upgrades identified as potential projects that would be led by this position. Ensure that updates are well researched and tested prior to scheduling production deployment.
 - Ensure appropriate data backup procedures are in place to meet service level expectations, recovery time objectives and recovery point objectives for the IT systems
 - Install and configure custom components or modules while maintaining formal audit logs and documentation to track changes
 - Perform IT systems capacity planning
 - Automate routine operational tasks using tools, scripting, and job scheduling where possible
 - Assess new IT systems solutions to ensure that operational and support requirements are met and either recommend approval or rejection of readiness for production deployment
 - Ensure that proposed changes are well tested in non-production environments where feasible to ensure minimal potential impact to production IT systems availability and performance
 - Act as a Subject Matter Expert to provide advanced IT systems technical information and guidance to others in support of operations
- Perform operational tasks to ensure that IT Systems application security controls are effectively implemented and enforced
- Perform operational IT Systems Applications monitoring
- Support application threat modelling exercises, vulnerability assessments and penetration testing activities
- Ensure that application patching standards are met, and procedures are performed across all IT Systems Applications

| 3. | IT Systems Applications: Provide Technical Support Resolve support issues and coordinate issue resolution with ITS team members, application vendors, college employees and stakeholders Serve as the primary contact for technical support with IT vendors and IT Systems Applications service providers, and is responsible for managing communication between these providers and the extended ITS operations and support team during issue resolution Act as a Subject Matter Expert to provide advanced IT Systems Applications technical information and guidance to others in support of issue resolution Provide support services to investigate and remediate security incidents | (20%) |
|----|---|-------|
| 4. | IT Systems Applications: Perform Project Technical Task Work Perform project task work related to IT systems, processes, and the operational administrative duties of this position Act as a Subject Matter Expert to provide advanced IT Systems Applications technical information | (20%) |
| 5. | IT Systems Applications: Research, Develop and Maintain Competencies Perform research to understand IT Systems Applications trends and advances in order to leverage evolving technology components in operational improvements Develop and maintain technical competencies and certifications | (20%) |

TOTAL:

100%

1. COMPLEXITY - JUDGEMENT (DECISION MAKING)

Complexity refers to the **variety** and relative **difficulty** of **comprehending** and **critically analyzing** the material, information, situations and/or processes upon which decisions are based.

Judgement refers to the **process** of identifying and reviewing the available options involved in decision making and then choosing the most appropriate option. Judgement involves the application of the knowledge and experience expected of an individual performing the position.

Provide up to <u>three examples</u> of the most important and difficult decisions that an incumbent is typically required to make.

- a) Given a wide range of tools and technical components this person must apply expert judgement to determine the most suitable configurations and procedures to efficiently and effectively deliver IT Systems Applications operations and to resolve related technical support issues. This expert judgement considers multiple facets such as fit for purpose, quality, cost effectiveness, maintainability, security, reliability, scalability and appropriateness for type of IT Systems Applications problems presented. Apart from the initial technical planning and configuration, this person must be able to apply lateral thinking skills to identify solutions to technical issues that may not be readily apparent and to systematically determine the root causes of specific issues.
- b) Resolving IT Systems Applications support issues often involves decisions to mitigate issues with some inherent trade-offs in the impacts. Performing an assessment of the impact, recommending a course of action, and collaboration with team members is critical to understanding the complexity of the situation and to applying appropriate judgement for the response.

2. EDUCATION (to be completed by the College)

Education refers to the **minimum level** of formal education and/or the type of training or its equivalent that is required of an incumbent at the **point of hire** for the position. This may or may not match an incumbent's actual education or training.

The College is to identify the minimum level of education and/or type of training or its equivalent that is required for the position based upon the College's recruitment standards.

| Non-Post Secondary | |
|------------------------------|-----------------------------|
| □ Partial Secondary School | Secondary School Completion |
| Post Secondary | |
| □ 1-Year Certificate | □ 4-Year Degree |
| □2-Year Diploma | □ □ Masters Degree |
| ⊠□3-Year Diploma/Degree | □ Post Graduate Degree |
| □ □ Professional Designation | Specify: |
| □□Other | Specify: |

A) Specify and describe any program speciality, certification or professional designation necessary to fulfil the requirements of the position.

- Required General:
 - **Project Management:** PMI Certified Associate in Project Management (CAPM) designation
 - IT Service Management: ITIL v4 Foundation Certification
 - **Business Analysis:** International Institute of Business Analysis Entry Certificate in Business Analysis (ECBA) Certification
- Required Technical:
 - Microsoft: M365 Fundamentals; Azure Fundamentals; M365 Security Administrator Associate; Azure Administrator Associate; Azure Security Engineer Associate; M365 Teams Administrator Associate; M365 Messaging Administrator Associate
 - IT and Information Security: CompTIA Security+; Palo Alto Networks Certified Cybersecurity Entry-level Technician (PCCSA); EC-Council Certified Network Defender (CND)
 - Core Networking: CompTIA Network+

B) Specify and describe any special skills or type of training necessary to fulfil the requirements of the position (e.g., computer software, client service skills, conflict resolution, operating equipment).

Strong and broad understanding of the various components of enterprise IT solutions required to deliver effective IT systems including cloud services; networks; enterprise and web applications; storage and server infrastructure; data architecture and services; information security; software development; data centre environment; server and desktop virtualization; various client devices and technologies

3. **EXPERIENCE** (to be completed by the College)

Experience refers to the amount of **related**, **progressive** work experience required to obtain the essential techniques, skills and abilities necessary to fulfil the requirements of the job at the **point of hire** into the position. This may or may not match the incumbent's actual amount of experience.

The College is to identify the minimum amount and type of experience appropriate for the position based upon the College's recruitment requirements.

| Experience required at the point of hire. I | Up to and including: |
|---|----------------------|
|---|----------------------|

| no experience required | □□ 4 years |
|------------------------|--------------|
| 3 months | ⊠□ 5 years |
| 6 months | □□ 7 years |
| 1 year | □□ 9 years |
| 18 months | □□ 11 years |
| 2 years | □□13years |
| 3 years | □□ 15 years |
| | 🔲 🗌 17 years |

Specify and describe any specialized type of work experience necessary to fulfill the requirements of the position.

 A minimum of five years of progressively responsible experience in IT solutions architecture and systems administration, providing leadership in managing projects, gathering requirements, developing and analyzing solutions.

4. INITIATIVE - INDEPENDENCE OF ACTION

Initiative - Independence of action refers to the **amount of responsibility** inherent in a position and the **degree of freedom** that an incumbent has to **initiate** or **take action** to complete the requirements of the position. An incumbent is required to foresee activities and decisions to be made, then take the appropriate action(s) to ensure successful outcomes. This factor recognizes the established levels of authority which may restrict the incumbent's ability to initiate or take action, e.g., obtaining direction or approval from a supervisor, reliance on established procedures/methods of operation or professional practices/standards, and/or built-in-controls dictated by computer/ management systems.

A) Briefly describe up to three typical job duties/types of decisions that the incumbent is required to perform using their initiative without first having to obtain direction or approval from a supervisor.

- a) The incumbent is expected to consider a diverse set of technical options related to the successful design and architecture of IT solutions. The incumbent must narrow the analysis to the most viable prospective options and resolution, independently of supervision.
- **b)** The incumbent is responsible for coordinating team activities within the approved parameters for the service delivery, operations and support.

B) Briefly describe up to three typical job duties/types of decisions that the incumbent is required to perform which required the direction or approval from a supervisor.

- a) Significant configuration changes to IT systems or changes to availability of IT systems.
- b) All purchases.

Give specific examples of guidelines, procedures, manuals (formal or informal), computer systems/programs that are used in performing job duties and in making decisions, e.g., Government regulations, professional or trade standards, College policies or procedures, department or program procedures, computerized/manual programs/systems and any other defined methods or procedures.

- Application Technical Manuals and Guides
- ITIL framework for IT service management
- COBIT framework for IT governance and value delivery
- PMI framework and standards for project management
- Agile Methodology
- Lean Methodology
- Kanban Principles
- St. Lawrence College strategic plan, business plans, policies and procedures
- St. Lawrence College ITS strategies, standards, policies and procedures
- Government privacy and freedom of information legislation
- Audit requirements for information systems

5. POTENTIAL IMPACT OF DECISIONS

Potential Impact of Decisions recognizes the **potential consequences** that **errors in judgement** made by an incumbent, despite due care, could have on the College. Usually, the higher the level of accountability inherent in a position, the greater the potential consequences there are on the College from errors in judgement.

Give up to three examples of the typical types of errors in judgement that an incumbent could make in performing the requirements of the position. Do not describe errors which could occur as a result of poor performance, or ones that are rare or extreme. Indicate the probable effects of those errors on the College, e.g., loss of reputation of program/College, waste of resources, financial losses, injury, property damage, affects on staff, students, clients or public.

- a) Errors in judgement in operating IT systems or support issue resolution could result in critical systems failures with wide-ranging consequences. Failing to select optimal solutions or to identify flaws can result in missed opportunities, inefficiencies, suboptimal performance, data loss, security breaches, information exposure or significant financial impact due to requirements for rework.
- b) Failing to decide on the relevant stakeholders for an IT solution design can result in missed requirements, unsatisfied or upset constituents, or lack of adoption surrounding an initiative. The range of impact includes damage to reputation of the college or it programs in the worst case, with the best case being a failure to maximize value delivery and stakeholder satisfaction in accordance with the level of allocated college resources.

6. CONTACTS AND WORKING RELATIONSHIPS

Contacts and Working Relationships refers to the **types**, **importance** and **intended outcomes** of the contacts and working relationships required by an incumbent to perform the responsibilities of a position. It also measures the skill level required to be effective in dealing with contacts and being involved in working relationships. This factor does **not** focus on the level of the contact, but on the **nature** of the contact.

Indicate by job title, with whom an incumbent is required to interact to perform the duties and responsibilities of the positions. Describe the nature, purpose and frequency of the interaction, e.g., exchanging information, teaching, conflict resolution, team consultation, counselling.

| Contacts | Contacts by Job Title Nature and Purpose of Contact | | | Frequency of Contact | |
|--|---|--|------------|-------------------------|--|
| Internal to the College: | | | Occasional | Frequent | |
| Internal to the college, e.g. students, staff, | Directors of All College Areas | Gathering project and IT solutions requirements | | х | |
| senior management, colleagues. | Deans and Associate Deans | Gathering project and IT solutions requirements | | х | |
| | Functional Support Staff | Gathering project and IT solutions requirements, directing project activities, coordinating IT systems support issue resolution | | х | |
| | ITS Senior Management (Directors, CISO, CIO) | Gathering project and IT solutions requirements, reporting on project status, seeking approval for significant project changes, seeking approval for significant changes to IT systems or availability of IT systems availability, coordinating IT systems support issue resolution | | x | |
| | ITS Technical Staff | Gathering project and IT solutions requirements, directing project activities, coordinating IT systems support issue resolution | | x | |
| | College Executive Team | Gathering project and IT solutions requirements | х | | |

| External to the College: | | | Occasional | Frequent |
|---|---|---|------------|----------|
| External to the college, e.g. suppliers, advisory committees, staff at | Application Vendors and Contracted Service Providers | Managing project activities and contracted services, coordinating IT systems support issue resolution | | х |
| other colleges, government, public/private sector. | Contracted Consultants | Managing the delivery of specialized knowledge or expertise | | х |
| Occasional (O) Frequent (F) | | n a while over a period of time. edly and often over a period of time. | | |

7a. CHARACTER OF SUPERVISION/FUNCTIONAL GUIDANCE

Character of Supervision identifies the **degree and type** of supervisory responsibility in a position or the nature of functional/program supervision, technical direction or advice involved in staff relationships.

| ($$) Check the applicable box(es) to describe the type of supervisory responsibility required by an incumbent in the position: |
|---|
| \Box Not responsible for supervising or providing guidance to anyone. |
| \boxtimes \Box Provides technical and/or functional guidance to staff and/or students. |
| \Box Instructs students and supervises various learning environments. |
| \boxtimes \Box Assigns and checks work of others doing similar work. |
| Supervises a work group. Assigns work to be done, methods to be used, and is responsible for the work performed by the group. |
| \square Manages the staff and operations of a program area/department.* |
| \square Manages the staff and operations of a division/major department.* |
| \Box Manages the staff and operations of several divisions/major departments.* |
| \Box Acts as a consultant to College management. |
| ☐ Other e.g., counselling, coaching. Please specify: |
| Includes management responsibilities for hiring, assignment of duties and work to be performed, performance management, and recommending the termination of staff. |
| Specify staff (by title) or groups who are supervised/given functional guidance by an incumbent. |
| Various cross-functional staff that are committed to task work on projects, involved in IT systems operations or support issue resolution. The incumbent must manage their activities in relation to relevant project plans, ITS procedures and approved commitment of time by the staff members' immediate supervisors |

7b. SPAN OF CONTROL

Span of Control is complementary to **Character of Supervision/Functional Guidance**. Span of Control refers to the **total number of staff** for which the position has supervisory responsibility, (i.e., subordinates, plus all staff reporting to these subordinates).

Enter the total number of full time and full time equivalent staff reporting through to the position. Also identify the number of staff for whom the position has indirect responsibility (contract for service), if applicable.

| Type of Staff | Number of Staff |
|-----------------------------|-----------------|
| Full-Time Staff | 0 |
| Non Full Time Staff (FTE) * | 0 |
| Contract for Service ** | 0 |
| Total: | 0 |

* Full Time Equivalency (FTE) conversions for non full time staff are as follows:

Academic Staff

Identify the total average annual teaching hours taught by all non full time teachers (part-time, partial load and sessional) for which the position is accountable and divide by 648 hours for post secondary teachers and 760 hours for non-post secondary teachers.

Support Staff

Identify the total average annual hours worked by part-time support staff for which the position is accountable and divide by 1820 hours.

Administrative Staff

Identify the total average annual hours worked by non full time administrative staff for which the position is accountable and divide by 1820 hours.

** Contract for Services

When considering "contracts for services," review the nature of the contractual arrangements to determine the degree of "supervisory" responsibility the position has for contract employees. This could range from "no credit for supervising staff" when the contracting company takes full responsibility for all staffing issues to "prorated credit for supervising staff" when the position is required to handle the initial step(s) when contract staffing issues arise.

8. PHYSICAL AND SENSORY DEMANDS

Physical/Sensory Demands considers the **degree** and **severity** of exertion associated with the position. The factor considers the intensity and severity of the physical effort rather than the strength or energy needed to perform the task. It also considers the sensory attention required by the job as well as the frequency of that effort and the length of time spent on tasks that cause sensory fatigue.

Identify the types of physical and/or sensory demands that are required by an incumbent. Indicate the frequency of the physical demands as well as the frequency and duration of the sensory demands. Use the frequency and duration definitions following the tables to assist with the descriptions.

PHYSICAL DEMANDS

Describe the types of activities and provide examples that demonstrate the physical effort that is required in the position on a regular basis, i.e., sitting, standing, walking, climbing, lifting and/or carrying light, medium or heavy objects, pushing, pulling, working in an awkward position or maintaining one position for a long period of time.

| Types of Activities that Demonstrate Physical | Frequency (note definitions below) | | | | |
|---|------------------------------------|----------|--------------|----------|------------|
| Effort Required | Occasional | Moderate | Considerable | Extended | Continuous |
| Sitting at computer station for data entry, system testing, updates, etc. | | | х | | |
| Normal computerized office environment – standing, walking, bending to retrieve files, using office equipment, etc. | | | | | х |

SENSORY DEMANDS

Describe the types of activities and provide examples that demonstrate the sensory effort that is required in the position on a concentrated basis, i.e., reading information/data without interruption, inputting data, report writing, operating a computer or calculator, fine electrical or mechanical work, taking minutes of meetings, counselling, tasting, smelling etc.

| | Frequency (note definitions below) | | | | | Duration |
|---|------------------------------------|----------|--------------|----------|------------|----------------------------------|
| Types of Activities that Demonstrate Sensory Effort Required | Occasional | Moderate | Considerable | Extended | Continuous | Short Intermediate or Long |
| Performing analysis of IT systems operations and support issue resolution | | | | Х | | L |
| Concentrated development of project management plans and schedules using a variety of computer applications | | | | х | | L |
| Preparing status reports, proposals, and presentations | | | | Х | | L |
| Email communication with project team members, stakeholders and ITS staff | | | Х | | | S |

FREQUENCY:

| Occasional: | Occurs once in a while, sporadically. |
|---------------|---|
| Moderate: | Occurs on a regular, ongoing basis for up to a quarter of the work period. |
| Considerable: | Occurs on a regular, ongoing basis for up to a half of the work period. |
| Extended: | Occurs on a regular, ongoing basis for up to three-quarters of the work period. |
| Continuous: | Occurs on a regular, ongoing basis throughout the entire work period except for regulated breaks. |

DURATION:

| Short: | Up to one hour at a time without the opportunity to change to another task or take a break. | |
|---------------|---|--|
| Intermediate: | More than one hour and up to two hours at a time without the opportunity to change to another task or take a break. | |
| Long: | More than two hours at a time without the opportunity to change to another task or take a break. | |

9. WORKING CONDITIONS

Working Conditions considers the frequency and type of exposure to undesirable, disagreeable environmental conditions or hazards, under which the work is performed.

Describe any unpleasant environmental conditions and work hazards that the incumbent is exposed to during the performance of the job.

Environment

Describe the types of activities and provide examples that demonstrate exposure to unpleasant environmental conditions in the day-to-day activities that are required in the job on a regular basis, e.g., exposure to dirt, chemical substances, grease, extreme temperatures, odours, noise, travel, verbal abuse, body fluid, etc. Indicate the activity as well as the frequency of exposure to undesirable working conditions.

Note on Travel: St. Lawrence College has adopted the following guidelines for travel. From the list below, please indicate which category best describes the travel required for the position.

- Local travel on a regular basis up to 2 times per week. Out-of-town travel on a regular basis 1 – 2 times per month.
- 2. Local travel on a regular basis more than 2 times per week. Out-of-town travel 2 – 8 times per month.
- 3. Out-of-town travel on a regular basis more than 8 times per month.

| Types of Activities That Involve Job Related | Frequency (note definitions below) | | |
|--|------------------------------------|----------|------------|
| Unpleasant Environmental Conditions. Include travel requirements (if any). | Occasional | Frequent | Continuous |
| Travel to attend project meetings (Tri-campus) | Х | | |

Hazards

Describe the types of activities and provide examples that demonstrate the hazards in the day-to-day activities that are required in the job on a regular basis, e.g. chemical substance, electrical shocks, acids, noise, exposure to infectious disease, violence, body fluids, etc. Indicate the activity as well as the frequency of exposure to hazards.

| Turner of Activities That Investor Job Deleted Herende | Frequency (note definitions below) | | |
|--|------------------------------------|----------|------------|
| Types of Activities That Involve Job Related Hazards | Occasional | Frequent | Continuous |
| Not applicable. | | | |

Frequency:

| Occasional | Occurs once in a while, sporadically. | |
|--|---|--|
| Frequent | Frequent Occurs regularly throughout the work period. | |
| Continuous Occurs regularly, on an ongoing basis, throughout most of the work period. | | |