



Code: 06B2
Family: IT-Architect
Service: Administrative
Group: Clerical, Accounting, and General Office
Series: Information Technology

CLASS TITLE: DOMAIN ARCHITECT

CHARACTERISTICS OF THE CLASS

Under supervision, develops technology strategy and vision, creates technology roadmaps, and selects specific technologies; and performs related duties as required.

This class is assigned to the City's Architect Information Technology Job Family which consists of architects that develop technology strategy and vision, create technology roadmaps, and select specific technologies, provide conceptual designs of the technology environment, and create high-level solution designs.

ESSENTIAL DUTIES

- Collaborates with product management in technical and business discussions relative to future architecture direction, when applicable
- Analyzes, designs, and develops technology roadmaps and implementation plans based upon a current vs. future state in a cohesive architecture viewpoint
- Gathers and analyzes data and develops architectural requirements at domain or project level and contributes to the architectural runway
- Participates in, develops, documents, and administers architectural governance processes
- Conducts architectural reviews and evaluations
- Performs architecture implementation and modification activities
- Assists in post-implementation continuous-improvement efforts to enhance performance and provide increased functionality
- Collaborates with other IT teams in the management of technical change, verification of testing results, and monitoring of technical standards compliance and deployment
- Analyzes the current architecture to identify weaknesses and may develop opportunities for improvements
- Provides a holistic, long-term, and proactive perspective on technology and its use
- Communicates the architecture process, its outcome, and ongoing results
- Advises and collaborates with product and delivery management on reporting status, issues, risks, and benefits
- Brings deep technical expertise, and a thorough knowledge and understanding of the IT capabilities necessary to deliver business value through technology
- Contributes to the domain technical and business discussions relative to future architecture direction

NOTE: *The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS

Education, Training, and Experience

- Graduation from an accredited college or university with a Bachelor's Degree in Computer Science, Information Systems, Computer Engineering, Systems Analysis or a directly related field plus seven (7) years of IT and business/industry work experience including architecture

design and deployment, systems life cycle management and infrastructure planning and operations; or an equivalent combination of education, training, and experience.

Licensure, Certification, or Other Qualifications

- None

WORKING CONDITIONS

- General office environment

EQUIPMENT

- Standard office equipment (e.g., phone, printer, copier, computers, mobile devices)
- Standard productivity suites (e.g., Microsoft Office Suite, OpenOffice, Google Workspace)

PHYSICAL REQUIREMENTS

- No specific requirements

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Considerable knowledge of:

- *financial models and budgeting and ability to propose and estimate the financial impact of architecture alternatives
- *translating future-state business capabilities and requirements into architecture requirements
- *providing valuable suggestions and solutions in areas of software development, use and maintenance
- *database technologies and business intelligence tools and aspects of designing and constructing data architectures.
- *Cloud and infrastructure components (server, storage, network, data, and applications), security best practices and automation technologies
- *Cloud technologies (e.g., Azure, S3, VMware, AWS), Java EE, .NET, Oracle, Cloud Technologies and proficiency in HTML, XML, JavaScript, SQL, Java or C#, SOAP-based web services
- designing and constructing operational data stores and data marts and developing reference architecture, principles, and standards
- agile methods and processes, common aspects of an enterprise technology architecture, and information principles and processes

Moderate knowledge of:

- data science concepts, business intelligence, and data warehouse design and implementation techniques.
- problem analysis, structured analysis and design, and programming techniques.
- network and security architecture, and ITSM and ITIL.
- system integration experience, including interface design, and familiarity with web-oriented architecture techniques

Knowledge of applicable City and department policies, procedures, rules, and regulations

Skills

- ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
- ACTIVE LISTENING - Give full attention to what other people are saying, take time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- CRITICAL THINKING - Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- COMPLEX PROBLEM SOLVING - Identify complex problems and review related information to develop and evaluate options and implement solutions
- TIME MANAGEMENT - Manage one's own time or the time of others
- COORDINATION WITH OTHERS - Adjust actions in relation to others' actions
- JUDGEMENT AND DECISION MAKING - Consider the relative costs and benefits of potential actions to choose the most appropriate one
- SYSTEMS ANALYSIS - Determine how a system should work and how changes in conditions, operations, and the environment will affect outcomes

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WRITE - Communicate information and ideas in writing so others will understand
- CONCENTRATE - Concentrate on a task over a period of time without being distracted
- RECOGNIZE PROBLEMS - Tell when something is wrong or is likely to go wrong
- REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense
- COME UP WITH IDEAS - Come up with a number of ideas about a topic
- MAKE SENSE OF INFORMATION - Quickly make sense of, combine, and organize information into meaningful patterns
- REACH CONCLUSIONS - Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)

Additional Competency Requirements

- COMMUNICATION FOR RESULTS – Writes, speaks and presents effectively. Explains the immediate context of the situation, asks questions with follow-ups and solicits advice prior to taking action. Develops presentations to influence others by using graphics, visuals or slides that display information clearly. Listens and asks questions to understand other people's viewpoints.
- GROWTH MINDSET – Takes ownership of personal growth. Identifies knowledge gaps. Asks questions of subject matter experts and seeks help when needed. Keeps abreast of information, developments and best practices within a field of expertise (e.g., by reading, interacting with others or attending learning events).

- **INITIATIVE** – Volunteers to undertake tasks that stretch his or her capability. Identifies who can provide support and procures their input. Identifies problems and acts to prevent and solve them.
- **OWNERSHIP AND COMMITMENT** – Volunteers to undertake tasks that stretch his or her capability. Checks the scope of responsibilities of self and others. Monitors day-to-day performance and takes corrective action when needed to ensure desired performance is achieved. Identifies problems and acts to prevent and solve them. Identifies who can provide support and procures their input.
- **ANALYTICAL THINKING** – Collects all the relevant information and data needed to address the problem. Organizes, classifies and synthesizes the data into fundamental issues. Breaks the information into manageable components. Identifies the logical outcomes from the analyses of the data collected and identifies the options and solutions for addressing the problems analyzed.
- **RISK MANAGEMENT** – Demonstrates an awareness of the risks involved with working within the organization, makes assessment of the risks of various projects and initiatives, and uses that to mediate his or her own behavior and work.
- **DESIGN THINKING** – Possesses the ability to undertake an analytic, creative and iterative process that leads to desired outcomes. Establishes a structural framework by which to analyze and define problems. Demonstrates the ability to flexibly use different problem-solving strategies and select the one that best meets the requirements of the situation.
- **THOROUGHNESS** – Performs tasks according to quality and output standards. Takes initiative to ensure that outcomes meet internal and external customer requirements. Solicits feedback on performance of new tasks. Measures accuracy using performance metrics. Sets improvement standards to reduce errors, omissions and oversights.
- **INFORMATION SEEKING** – Gathers and analyzes information or data on current and future trends of best practice. Uses appropriate tools, techniques and sources to gather, update and monitor information. Checks for accuracy of interpretation. Seeks out the appropriate people for guidance when needed, depending on the type of issue.
- **OUTCOME DRIVEN** – Evaluates the effectiveness of current metrics in pursuit of improved performance indicators. Takes appropriate actions to ensure obligations are met. Demonstrates the ability to challenge existing practices in order to become more effective. Contributes to improve work methods, outcomes and team performance.
- **KNOWLEDGE OF EMERGING TECHNOLOGY** – Applies new technology to solve business information needs. Participates on teams that deliver a new technology to the business. Records actual experiences in successfully applying the technology and identifies associated potential risks and rewards.
- **STRATEGIC TECHNOLOGY PLANNING** – Supports research related to functional architectures and technology needs for a significant work area. Provides input to strategic technology planning. Identifies and analyzes unit's strengths and weaknesses and proposes options for investment in, and ongoing maintenance of, a function or work process.

Other competencies as required for successful performance in the lower-level series.

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
March 2023