CLASS TITLE: CHIEF PROGRAMMER/ANALYST

CHARACTERISTICS OF THE CLASS

Under direction, manages the maintenance, development, and implementation of computer applications for distributed and centralized processing systems for a City department, and performs related duties as required

ESSENTIAL DUTIES

- Conducts feasibility studies for the development of new computer systems to meet the information and operational needs of the department
- Directs staff engaged in the review and analysis of business operations and the development of new or enhanced computer systems
- Ensures preparation of detailed program documentation for future reference
- Monitors the testing, installation, and implementation of new software and systems (e.g., servers, network devices, web-based applications)
- Oversees the modification and/or maintenance of existing programs and databases to conform to business requirements or systems changes
- Provides technical advice to staff and vendors engaged in the development or enhancement of computer systems
- Ensures computer systems developed by contract vendors meet the information and operational needs of the department
- Performs systems analysis and design functions for highly complex applications for both centralized and distributed computer systems
- Plans and allocates resources across different departmental initiatives related to information technology
- Troubleshoots and corrects complex software malfunctions
- Advises and trains management and other users on the integration of new hardware and software technologies into business operations
- May attend conferences to keep abreast of changes in information technology

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 Sciences, Information Technology/Systems, or a directly related field, plus five years of experience in the design and development of computerized systems of which two years are in a supervisory role related to the responsibilities of the position, or an equivalent combination of education, training and experience, provided that the minimum degree requirement is met.

Licensure, Certification, or Other Qualifications

- None

WORKING CONDITIONS

- General office environment

EQUIPMENT

- Personal computers and peripheral equipment (e.g., desktop computer, laptop computer, hand-held computer, computer terminals, modems, scanner)
- Standard office equipment (e.g., telephone, printer, photocopier, fax machine, calculator)
- Client/server computer
- Local area/wide area communications network
- Micro and mini computers

PHYSICAL REQUIREMENTS

- No specific requirements

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Advanced knowledge of:

- *applicable computer software packages
- *methods, practices, and procedures for analyzing and resolving computer-related problems
- *commercial computer systems applications and their capabilities
- * methods and techniques of database analysis and design
- *computer operating systems
- *programming logic, data manipulation, and integrated environments

Considerable knowledge of:

- *computer systems management
- *IT systems development practices, standards, and procedures

Some knowledge of:

- *management and supervisory methods, practices, and procedures

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

Other knowledge as required for successful performance in the Principal Programmer/Analyst class

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, taking 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
- *MONITORING - Monitor and assess performance of one's self, other individuals, or organizations to make improvements or take corrective action

- *COMPLEX PROBLEM SOLVING - Identify complex problems and review related information to develop and evaluate options and implement solutions
- INSTRUCTING – Teach others how to do something
- *MANAGEMENT OF PERSONNEL RESOURCES - Motivate, develop, and direct people as they work and identify the best people for the job
- *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
- *SYSTEMS EVALUATION - Identify measures or indicators of system performance and the actions needed to improve or correct performance relative to the goals of the system
- *PROGRAMMING - Write computer programs for various purposes
- *TECHNOLOGY DESIGN - Generate or adapt equipment and technology to serve user needs
- *TROUBLESHOOTING - Determine causes of operating errors and decide what to do about it

Other skills as required for successful performance in the Principal Programmer/Analyst class

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
- REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense
- 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)

Other abilities as required for successful performance in the Principal Programmer/Analyst class

Other Work Requirements

- PERSISTENCE - Persist in the face of obstacles on the job
- INITIATIVE - Demonstrate willingness to take on job challenges
- LEADERSHIP - Demonstrate willingness to lead, take charge, and offer opinions and direction
- ADAPTABILITY/FLEXIBILITY - Be open to change (positive or negative) and to considerable variety in the workplace
- DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks
- INDEPENDENCE - Develop own ways of doing things, guide oneself with little or no supervision, and depend mainly on oneself to get things done

- INNOVATION - Think creatively about alternatives to come up with new ideas for and answers to work-related problems
- ANALYTICAL THINKING - Analyze information and using logic to address work or job issues and problems

Other characteristics as required for successful performance in the Principal Programmer/Analyst class

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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
(Valtera Corporation)

Date: July, 2010