CLASS TITLE: PROGRAMMER

CHARACTERISTICS OF THE CLASS
Under supervision, performs basic programming functions for the development and modification of applications used on distributed and centralized processing systems, and performs related duties as required.

ESSENTIAL DUTIES
- Codes, tests, and debugs programs based on program specifications
- Modifies and/or maintains existing programs and databases to conform to business requirements or systems and process changes
- Monitors applications to determine conformance with user requirements
- Prepares documentation on program coding and testing processes
- Troubleshoots and corrects routine software malfunctions
- Configures software applications for operations on existing hardware
- Participates in the installation and maintenance of new software packages
- Performs file back up and restoration tasks
- Assists senior-level staff in coding and debugging complex programs

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.

Licensure, Certification, or Other Qualifications
- None

WORKING CONDITIONS
- General office environment

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

- No specific requirements

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Some knowledge of:

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

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

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
- *MATHEMATICS - Use mathematics to solve problems
- *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
- *PROGRAMMING - Write computer programs for various purposes
- QUALITY CONTROL ANALYSIS – Conduct tests and inspections of products, services or processes to evaluate quality or performance
- TECHNOLOGY DESIGN – Generate or adapt equipment and technology to serve user needs
- REPAIRING - Repair machines or systems using the needed tools
- *TROUBLESHOOTING - Determine causes of operating errors and decide what to do about it

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WRITE - Communicate information and ideas in writing so others will understand
- RECOGNIZE PROBLEMS - Tell when something is wrong or is likely to go wrong
• REASON MATHEMATICALLY - Choose the right mathematical methods or formulas to solve a problem

Other Work Requirements
• INITIATIVE - Demonstrate willingness to take on job challenges
• DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
• ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks
• ANALYTICAL THINKING - Analyze information and using logic to address work or job issues and problems

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