DISTINGUISHING FEATURES OF THE CLASS:

The fundamental reason this classification exists is to perform systems analysis and applications programming involving single or multiple information technology systems, to assist in the overall analysis and design of information technology systems, to conduct financial studies for the justification of information technology systems, and to assist other technical employees in the development and maintenance of information technology subsystems and programs. Employees in this classification are responsible for multiple information technology subsystem conceptualization, design, planning, implementation, and maintenance, and for user and computer operations personnel training. Work includes conceiving, designing, and maintaining databases and telecommunications integrated with other systems; translating specifications into computer language; testing results; designing or assisting in the design of file structures. Incumbents are expected to bring projects to conclusion, including development of operating procedures, instruction and training, and required documentation. Work is performed and technical decisions are made with some latitude for independent judgment, under general supervision with performance evaluated on results obtained.

ESSENTIAL FUNCTIONS:

- Conceptually and programmatically debugs programs to isolate problems and takes appropriate actions to correct them;
- Identifies problems and reviews related information to develop and evaluate options and implement solutions;
- Writes, corrects, and makes modifications to computer programs;
- Successfully develops and executes test plans that thoroughly test applications and allow for quality implementations of new or modified applications and reviews results;
- Analyzes current procedures and makes recommendations on simplifying those procedures;
- Work effectively with customers to learn specific design requirements and perform analysis and design of computer applications;
- Evaluates improvements and benefits which could be derived from modifications of existing systems;
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- Analyzes problems and prepares functional workflow diagrams, input and output forms, and detailed requirements of computer program specifications;
- Assists in the overall analysis and design of information technology systems;
- Provides staff and users with assistance solving computer related problems;
- Acts as a technical liaison between information technology staff and internal and external customers;
- Prepares and maintains documentation of applications;
- Prepares and presents written and verbal reports;
- Plans and conducts training sessions for information technology systems customers;
- Maintains regular and reliable attendance.
- Demonstrates superior seamless customer service, integrity, and commitment to innovation, efficiency, and fiscally responsible activity.
- Works more than forty hours in a workweek without additional compensation to perform assigned job duties, including weekends, evenings, early morning hours, and holidays as required.

Required Knowledge, Skills and Abilities:

Knowledge of:

- Capabilities, limitations, and functional applications of information technology.
- Flowcharting, data modeling, process modeling, form design, and control procedures.
- Research methods and techniques including structured system analysis and design, and information engineering.
- Data input methods and control techniques for computer processing.
- Principles for conducting a business system analysis, including the analysis of procedures, equipment, and methods.
- Software unit and integration testing, object oriented technologies, and/or event driven concepts.
- Forms design and report design.
- At least one type of database organization access and retrieval technique.
- High level computer programming languages.

Ability to:

- Analyze, interpret, and present research findings to prepare design specifications.
- Analyze specifications and instructions to develop appropriate systems and programs.
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- Design effective information technology subsystems and develop appropriate programs.
- Conduct analyses, interpret research findings, conceive a variety of solutions to functional problems, and reduce abstract ideas to easily understood procedures.
- Maintain multiple information technology systems using different programming languages and operating systems.
- Monitor and/or observe data to determine program problems.
- Develop logical code for efficient program execution.
- Debug new and existing programs.
- Establish and maintain effective working relationships with management, staff, contractors, and/or vendors.
- Produce written documents with clearly organized thoughts using proper English sentence construction, punctuation, and grammar.
- Communicate orally with other City employees, customers, and the public in face-to-face one-on-one settings, in group settings, or using a telephone.
- Establish priorities to meet objectives.

Additional Requirements:

- Appointments to positions in the Police Department are subject to meeting appropriate polygraph and background standards.
- Some positions require the use of personal or City vehicles on City business. Individuals must be physically capable of operating the vehicles safely, possess a valid driver license and have an acceptable driving record. Use of a personal vehicle for City business will be prohibited if the employee does not have personal insurance coverage.
- Some positions will require the performance of other essential and marginal functions depending upon work location, assignment, or shift.

ACCEPTABLE EXPERIENCE AND TRAINING:

Two years of experience in computer applications programming and development and systems analysis and a bachelor's degree in computer science, computer information systems, mathematics, or a related field. Other combinations of experience and education that meet the minimum requirements may be substituted.