DISTINGUISHING FEATURES OF THE CLASS:

The fundamental reason this classification exists is to develop and maintain complex applications, analyze systems and specifications and recommend program structure and logic, conduct technical and financial studies for the design and justification of information technology systems, coordinate and perform the most advanced systems and analysis/assignments, and act as project or team leader in the enhancement and/or maintenance of computer applications. Some positions are required to supervise and provide leadership to lower level positions. An employee in this classification is involved with one or more applications utilizing different database concepts and programming languages. Work includes the design and program maintenance of databases and telecommunications, which are integrated with other complex information technology systems, financial analysis of alternative approaches, advanced system analysis, and presentation of findings to customers and City management. Work is performed and technical decisions are made with a high degree of independence, and performance is evaluated on results obtained.

ESSENTIAL FUNCTIONS:

- Plans, assigns, oversees, and reviews the performance of personnel assigned to projects and those in lower classifications;
- Prepares comprehensive cost estimates and project plans for the design and justification of information technology systems;
- Prepares and presents written and oral reports to management of proposed information technology systems, including the effect on all users, impact on computer resources, anticipated costs and benefits, and equipment, times, and personnel needs;
- Provides problem analysis support to diagnose and remedy problems in operating procedures, computer hardware, system software, and computer application programs;
- Oversees the writing of operating procedures for user and computer operating personnel;
- Conducts systems analysis and design studies and prepares concept and design specifications;
City of Phoenix

- Serves as project leader and monitors and reviews the work performance of personnel also assigned to projects;
- Presents oral reports to management on proposed computer applications;
- Writes reports to management on proposed computer applications, including the effect on all users, the impact on computer resources, anticipated costs and benefits, and equipment, time, and personnel needs;
- Analyzes systems dumps and reports to isolate program problems and take appropriate actions to correct them;
- Analyzes the most complex work procedures and job methods and presents concepts to simplify those procedures;
- Analyzes departmental systems needs, makes recommendations and designs the most effective means to satisfy those needs;
- Analyzes existing computer programs to improve computer productivity;
- Develops and executes test plans to thoroughly test application upgrades and patches;
- Evaluates improvements and benefits which could be derived from modifications of existing systems;
- Analyzes computer functionality problems to isolate application problems and takes appropriate action to correct;
- Trains staff and users to work with computer systems and programs;
- 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.
- Research techniques and methods of presentation.
- High level computer programming languages.
- Comprehensive business analysis functions in complex projects.
- Relational database principles, analysis, and modeling and retrieval techniques.
- Data communications security and privacy techniques.
- Project management and organization, including monitoring time and dollar expenditures for tasks performed.
- Principles and practices of personnel management and supervision.
City of Phoenix

Ability to:

- Analyze, interpret, and report research findings to prepare design specification.
- Design effective information technology systems.
- Facilitate work groups and design teams.
- Maintain multiple information technology systems that may have different databases and use different programming languages and operating systems.
- Instruct others in complex technical subjects and processes.
- Perform a broad range of supervision or project leadership over others.
- Develop data and process models using structured analysis and design and information engineering techniques.
- Identify complex problems and review related information to develop and evaluate options and implement solutions.
- Translate abstract ideas to easily understood procedures.
- Work cooperatively with other employees, consultants, vendors, and the public to manage vendor relationships and maintain technology standards.
- Technically document changes and updates as required.
- Communicate effectively with non-technical users in defining their needs and essential requirements.
- Write comprehensive technical or end user system documentation.

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's license and have an acceptable driving record. Use of 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:

Three years of experience in applications analysis and programming, systems analysis and design, including project leader responsibility, and a bachelor's degree in computer science, computer information systems, business administration, mathematics, or related field. Other combinations of experience and education, which meet the minimum requirements, may be substituted.