

## FIRE SYSTEM PROGRAMMER

### NATURE OF WORK

This is advanced level technical work performing complex computer programming and/or complex systems analysis work.

Work involves responsibility for the design and development of complex computer programs and all phases of the conceptual and detail design of the computer system; developing detailed specifications, documentation and related user information; and providing technical assistance for all levels of programming regarding specific applications and systems design. Systems analysis work is performed under minimal supervision. An employee in this classification exercises independent judgment and initiative. Supervision is received from an administrative superior.

### EXAMPLES OF WORK PERFORMED

Analyzes and documents existing systems to determine processing requirements; confers with fire administration, logistics, and operational users to resolve questions of program intent, output requirements, input data acquisition, extent of automatic programming and coding use and modification, and inclusion of internal checks and controls; identifies and designs system alternatives to achieve the needs of the department.

Acts as the local administrator for existing software systems with contracted vendors.

Designs and develops applications; meets with users to determine program requirements; prepares documentation and related information.

Develops conceptual and detailed design specifications; writes detailed logical flow charts to represent work order of data to be processed and to describe input, output and arithmetic and logical operations involved; tests and corrects program errors by altering program steps and sequence; analyzes, reviews, and rewrites programs to increase operating efficiency or adapt to new requirements.

Develops detailed specifications, code, documentation and related user information required to complete program development maintenance activities; prepares program logic flow charts and processing diagrams.

Evaluates long range administrative data requirements of the Department; recommends revisions in standards, guidelines, hardware, software and training techniques.

Manages department data in accordance with existing state, local, and federal retention standards.

Recommends system design approaches and revisions which streamline programming and operation of the system; identifies problem areas and recommends solutions and standards.

Acts as a liaison between Lincoln Fire and Rescue users and Information Services.

Performs all duties within the established policies, standards and guidelines of the Fire Department.

Performs related work as required.

#### DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Thorough knowledge of current programming language.

Thorough knowledge of SQL, C# and other programming formats.

Thorough knowledge of data base management, systems and technology for mainframe and microcomputers.

Considerable knowledge of the principles, methods and techniques of computer programming languages used in data processing.

Considerable knowledge of the principles and techniques of program planning and control requirements.

Considerable knowledge in the display of data in tabular form, charts, graphs, website and dashboard design.

Knowledge of systems development methodologies.

Ability to exhibit independent judgment and initiative in analyzing data processing systems and to make sound recommendations and modifications.

Ability to utilize technical manuals relating to programming languages, system operations and data base management.

Ability to communicate effectively both orally and in writing.

Ability to establish and maintain effective working relationships with co-workers and users.

Ability to successfully implement application systems in a structured environment.

#### MINIMUM QUALIFICATIONS

Graduation from a four-year college or university with major course work in computer science, systems analysis and programming, and two years of experience in the design and development of complex computer programs and/or systems analysis; or any equivalent combination of training and experience that provides the desirable knowledge, abilities and skills.