

PROGRAMMER/ANALYST

DEFINITION

Under direction, to select symbols from a coding system specific to the District computers and operational systems; to code successive steps of a program for conversion to machine instruction to process data; to assist in the set up, loading and troubleshooting of computer hardware and software; and to do other related work as required.

ESSENTIAL DUTIES

- interpret the sequence of alphabetic, numeric or special characters pertaining to various business and educationally related programs.
- translate program logic statements into machine language for computer operational instructions.
- prepare symbolization worksheets for transfer to machine input tapes or disks.
- detail the relationship of the coding system to program steps for ease of program debugging.
- confer with other data processing personnel to ensure adherence to program objectives and system intent.
- prepare flow charts, block diagrams, data definitions, operational steps to computer language to ensure that the programming documentation is clear and logical.
- make minor changes to established programs to adapt to new user requirements.
- assist in the design of computer program logic.
- review and analyze computer operational procedures and guidelines, and develop solutions to user problems.
- assist in the testing and debugging of programs to ensure adherence to design criteria and user specifications.
- may set up, operate, monitor and control the District computer in pursuing program application test runs.
- assist in the recording, debugging and testing processes, and in the training of users in the use of the programmed application systems.
- provide assistance and leadership to data processing and programming personnel to ensure that the information technology unit functions in an optimal mode.

QUALIFICATIONS

Knowledge of:

Principles, theory, design of data processing operating systems and related software; Software, operating, data base, and telecommunication systems, include COBOL, BASIC, VISUAL BASIC, and other programming languages; Methods, techniques, and procedures for writing programs for various computer operations.

Ability to:

Skillfully code programs into convertible machine language; prepare flow charts and documentation pertaining to program steps and logic with speed and accuracy; analyze user needs and problems, and develop clear and logical solutions; prepare documentation and operating procedures in a clear and concise manner; communicate effectively in oral and written form; understand and carry out oral and written directions; establish and maintain cooperative working relationships.

PHYSICAL DEMANDS

The physical requirements indicated below are examples of the physical aspects that this position classification must perform in carrying out essential job functions.

- Persons performing service in this position classification will exert 10 to 20 pounds of force frequently to lift, carry, push, pull, or otherwise move objects
- This type of work involves sitting most of the time, but may involve walking or standing for brief periods.
- Perceiving the nature of sound, near and far vision, depth perception, providing oral information, the manual dexterity to operate business related equipment, and handle and work with various materials and objects are important aspects of this job.

Reasonable accommodation may be made to enable a person with a disability to perform the essential functions of the job.

EXPERIENCE AND EDUCATION

Any combination of experience and training that would likely provide the required knowledge and skill is qualifying. A typical way to obtain the required knowledge and skill would be:

Experience: Two years of experience in programming, system analysis and design, preferably in an educational setting.

Education: Equivalent to the completing of an Associate of Arts degree with an emphasis in computer science, or a closely related field.

License Requirement: Possession of a valid California Motor Vehicle Operator's License.

Condition of Employment: Insurability by the District's liability insurance carrier.