INFORMATION SYSTEMS SPECIALIST 1

Nature of Work

Under direct supervision, performs entry level technical work in installing, implementing and maintaining multiple platforms and multiple applications and/or assists in the development of a computer literacy curriculum and training for a large agency or multiple agencies. Depending upon the assignment, may specialize primarily with Local Area Network/Wide Area Networks. Troubleshoots hardware and software problems which occur in various networked micro and mini computer systems. Evaluates overall effectiveness, strengths and weaknesses of software systems and compatibility with the hardware and software of current installations. May specialize in an area of technical expertise such as networking technologies, data communications, hardware support, software support, training or information technology forensic examinations and conducting investigations of computerized accounting or other computerized records systems. Performs related work as required.

Distinguishing Characteristics

This is entry level work where the incumbent is given less complex assignments and the work is reviewed regularly. However, as skills are demonstrated, the incumbent advances to less routine assignments and performing independently. This class series is distinguished from the Information Systems Coordinator in that Information Systems Specialist plans, installs and maintains network components for the entire department(s) and provides technical support to network users. May include full-performance information technology forensic examinations of computer hardware, software or records systems. NOTE: Promotion from this class may occur only if and when the job duties and responsibilities change significantly enough to make a higher level classification more appropriate.

Examples of Work

Supports end-users via telephone and/or site visit regarding system problems such as access and/or security, printer access and operations (through LAN, mid-range computer or IS&C system control units), server based and PC standalone applications, and/or general system(s) problems on LAN, mid-range system, and/or access to other systems (for example IS&C's mainframe, federal systems), internet access, private time-sharing computer services, or external dial-up/dial-in access to various systems.

INFORMATION SYSTEMS SPECIALIST 1 (CONT'D)

Examples of Work (cont'd)

Uses diagnostic and/or monitoring software to identify problems and takes appropriate corrective action, either by repairing unit or contacting appropriate vendor.

Participates in the review and/or production of office automation plans and requests for hardware/software; reviews needs analysis and determines applications which could streamline the process; may meet with users to clarify work flow or procedures; researches alternative hardware/software which could further enhance the system; reports to superiors any problems with recommended course of action. Plans, conducts or assists in group and one-on-one training of computer applications and operations software and proper use of hardware in the state data processing facility, excluding personal computer support.

Develops training modules and instructional materials.

Trains co-workers on networking setup and operations and develops and maintains current LAN documentation.

Maintains current knowledge level by researching technical literature and attending classes/seminars, contact technical staff in other state, federal and private agencies for information; may write or supply users with information to complete requisition requests or specifications.

Tests new hardware or operating software supplied by vendors to determine the scope of capabilities, accuracy of functions, and level of user literacy required to operate the system; writes documentation on hardware and software which have been tested in-house.

Maintains detailed inventory of hardware and software.

Serves as a forensic examiner responsible for planning, coordinating and directing forensic activities; inventories and examines computer-related evidence such as magnetic media storage devices, floppy/hard disks, optical disks, memory cards and magnetic strip cards.

Provides technical guidance and assistance to investigators to prevent data and equipment damage.

Trains federal, state and local law enforcement personnel on computer examination/investigation techniques.

May be required to testify in court on the procedures and methods used to obtain data.

INFORMATION SYSTEMS SPECIALIST 1 (CONT'D)

Knowledge, Skills and Abilities
  Knowledge of capabilities and limitations of computers and
    related devices.
  Knowledge of local area and wide area networking, information
    processing and communications concepts and standards.
  Knowledge of PC, mini and mainframe operating systems.
  Knowledge of computer hardware, software and its terminology.
  Knowledge of proper methods of evidence handling and storage.
  Ability to clearly report activities and identify potential
    problem areas to manager.
  Ability to communicate clearly, both orally and in writing.
  Ability to compile information and interpret technical
    information in user friendly formats.
  Ability to perform computer forensic examinations.
  Ability to duplicate and preserve digital evidence.

Minimum Qualifications
  Training: Bachelor's degree from an accredited college or
    university.
  Substitution: Three years of full-time or equivalent part-
    time paid personal computer or server support experience
    may be substituted for the required training. Successful
    completion of twelve credit hours or the equivalent thereof
    of industry recognized authorized/ certified LAN
    administration, network service/support and/or network
    technologies training may substitute for one year of the
    required training.
  Experience: Two years of full-time or equivalent part-time
    paid experience in information processing, one year of
    which includes personal computer support and/or training.
  Substitution: Twelve hours of computer science or data
    processing may substitute for one year of information
    processing experience excluding personal computer support.

<u>FOR FORENSIC IT SPECIALIST POSITIONS</u>
  Training: Bachelor's degree from an accredited four-year
    college or university with at least 20 semester hours in
    computer science, information technology, information
    systems analysis, information management, mathematics,
    computer engineering, electrical/electronic engineering or
    other directly related field.

INFORMATION SYSTEMS SPECIALIST 1 (CONT'D)

Minimum Qualifications (cont'd)
   Substitution: Bachelor's degree from an accredited four-year college or university and two years full-time or equivalent part-time paid law enforcement investigative experience involving the recovery of evidence from computers or other storage media may be substituted for the 20 semester hours in the specific disciplines.
   Experience: Two years of full-time or equivalent part-time paid experience in information technology forensic investigations or in computer systems analysis of accounting/auditing systems.
   Substitution: Possession of one of the following certifications may substitute for the experience: A+ Certification Personal Computer Hardware Course; Network+ Certification; FBI Computer Analysis Response Team (CART) Field Examiner Certification Course; or basic computer forensic training from a recognized training facility.

Established: 3/21/96
Revised: 11/15/01, 1/9/06, 1/31/06
Effective: 1/31/06