



**JULY 2012**  
**FLSA: EXEMPT**

## **SENIOR INFORMATION TECHNOLOGY ANALYST**

*This class specification indicates, in general terms, the type and level of work performed as well as the responsibilities of employees in this classification. The job functions described are not to be interpreted as being all-inclusive to any specific employee.*

### **DEFINITION**

Under general direction, provides highly advanced professional support in the analysis, design, evaluation, development, programming, testing, implementation, documentation, and maintenance of a wide variety of systems and programs for the District; provides highly advanced support to departments with very complex computer systems and programs and/or enterprise systems; performs database management duties; troubleshoots, analyzes, and resolves highly complex systems and network hardware and software problems; serves as a project manager on assigned projects; evaluates and recommends current and third party systems and applications; provides highly technical support, expertise, and training to end users; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from the assigned supervisory and/or management staff. Exercises no direct supervision of staff. May coach and/or mentor less experienced staff.

### **CLASS CHARACTERISTICS**

This is the full journey-level class in the professional Information Technology Analyst series. Employees at this level perform most difficult and complex assignments, projects, analyses, and programs assigned to the journey-level classes within this series, receive only occasional instruction or assistance as new or unusual situations arise, and have advanced knowledge of the concepts, practices, procedures, and policies of the assigned functions. Responsibilities may include guidance on programs and/or projects and leads by example. This class is distinguished from the Principal Information Technology Analyst in that the latter is the advanced-journey, lead-level in the professional IT class series that exercises technical and functional supervision over and provides training to assigned staff, serves as a Business Analyst for one or more departments, and serves as a project or program manager for enterprise systems with District-wide impact.

### **EXAMPLES OF ESSENTIAL JOB FUNCTIONS** (Illustrative Only)

*Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.*

- Provides highly advanced professional level support to departments with highly complex systems and programs including the analysis, evaluation, design, development, and testing of software and hardware programs to support the database, networking, systems, and business application needs of the District.
- Designs and develops new or enhanced complex systems and applications; analyzes user operations and business requirements to design and develop technology solutions; reviews, evaluates, and recommends current and third party systems and applications; creates or oversees the development of data flow diagrams and other systems documentation to develop program specifications; designs

optimum system configurations; develops and implements testing plans; ensures system quality assurance; determines whether new programs meet users' business and technology requirements and makes adjustments as required.

- Evaluates network protocols, hardware, and software to determine their applicability to District network needs; evaluates new applications to determine integration with current systems and applications.
- Investigates, analyzes, and resolves network related problems; resolves compatibility problems across systems and networks; troubleshoots complex network failures, router problems, and telecommunications problems; recommends and implements changes and improvements.
- Analyzes network security and performance issues; identifies potential security and utilization or performance issues; designs strategies and recommendations to improve security and network performance.
- Performs database management, analysis, administration and maintenance duties; provides support to information technology staff in planning, designing, and implementing databases; designs and modifies database structures, tables, files, views, and indexes; manages and maintains database and file space allocations; develops methodologies to export and import data within multiple operating environments; plans future storage requirements.
- Ensures database availability to system users; provides and controls user access; maintains database security to ensure data integrity; monitors users to ensure compliance with operational and security procedures; monitors database performance; makes database tuning changes as required; makes recommendations on enhancements to optimize resources; conducts and maintains database systems back-ups to ensure timely recovery of data.
- Performs highly complex programming duties; determines method of integrating new programming code into existing programs to meet user needs.
- Configures, designs, and maintains complex telecommunications units and/or peripherals; troubleshoots telecommunications equipment problems to ensure functional operation; performs repairs as necessary.
- As assigned, serves as project manager on information systems projects; analyzes client information system needs; recommends solutions and appropriate technology to meet client needs; designs project and resource plans and schedules; develops proposals using cost/benefit analyses; evaluates proposed system hardware and software to ensure compatibility with existing systems; oversees the installation and evaluation of software and hardware; controls, monitors, and reports budget expenditures; orders materials as needed; directs members of the project team; selects and monitors contractors for outside services when required for a project; develops written reports and presentations on project status.
- Performs technical writing duties in the development and production of complex system documentation, instructional, and procedural manuals.
- Identifies training issues and coordinates training sessions for client users on assigned systems or applications; develops training schedules; designs training manuals; conducts training sessions.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of information technology.
- When assigned to programs and/or projects, provides leadership and guidance to others. As a program and/or project leader, may direct, assign, train, monitor and review the work activities of team members; determines work priorities; oversees quality and quantity of work performed and ensures adherence to established procedures by instructing employees accordingly; is a reference to employees by possessing specialized skills; develops and implements work improvements.
- Performs related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Operations, services, and activities of a comprehensive information systems program.
- Principles and practices of project management.

- Highly complex principles, practices, and methods of system design, development, analysis, testing and security administration.
- Methods and techniques of evaluating highly complex systems and business requirements and developing information systems solutions.
- Advanced programming languages, methods, and techniques including integrated database management applications.
- Methods and techniques of resolving highly complex network system compatibility and integration issues.
- Principles, practices, methods, and techniques of supporting a comprehensive database design, management, and administration program.
- Operational characteristics of a variety of database systems, tools and utilities.
- Principles and practices of quality assurance, data security, integrity, backup, and recovery processes in assigned systems area.
- Methods and techniques of installing and maintaining network devices including switches, routers, and hubs.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Modern principles and practices of record keeping and reporting.
- Modern office practices, methods, and computer equipment and applications related to the work, including word processing, database, and spreadsheet applications.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for providing guidance and training to less experienced staff.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

**Ability to:**

- Analyze department operations, procedures, and data to recommend, design, and develop logical solutions to complex systems problems.
- Perform highly complex systems and applications programming and analysis duties.
- Recommend and implement quality assurance and security procedures for assigned systems.
- Provide advanced-level technical systems support by identifying and resolving problems for highly complex systems and applications.
- Provide complex support in the design, configuration, implementation, and testing of wide area network operating systems, hardware and software.
- Analyze and troubleshoot complex local and wide area network operating, hardware, and software system problems.
- Perform database management, administration, and maintenance functions.
- Evaluate and make recommendations to accommodate future data storage needs.
- Develop and modify database models based on District information technology needs.
- Prepare clear and concise technical reports and documentation.
- Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, rules, and regulations.
- Enter and retrieve data from a computer with sufficient speed and accuracy.
- Establish and maintain a variety of filing, record-keeping, and tracking systems.
- Understand and carry out a variety of complex instructions in a responsible and independent manner.
- Lead, direct and review the work of project staff.
- Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.

- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.
- Train others on proper work procedures and lead by example.
- Demonstrate safe work practices and procedures in the workplace.

**Employment Standards:**

*Any combination of training and experience that would provide the required knowledge, skills, and abilities may be qualifying as determined by OCSD.*

1. Equivalent to a bachelor's degree from an accredited college or university which is accredited by the US Department of Education, with major coursework in computer science, information systems, or a related field; AND
2. Six (6) years of increasingly responsible information systems or network programming and analysis experience including two (2) years of experience at a level comparable to an Information Technology Analyst III at the District.

**Licenses and Certifications:**

- Possession of, or ability to obtain, a valid California Driver's License by time of appointment.
- Possession of information technology industry recognized certifications are desirable.

**Disaster Service Workers:**

All Orange County Sanitation District employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employment with the Orange County Sanitation District requires the affirmation of a loyalty oath to this effect. Employees are required to complete all related training as assigned, and to return to work as ordered in the event of an emergency.

**PHYSICAL DEMANDS**

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing in and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds.

**ENVIRONMENTAL ELEMENTS**

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.