

## PRINCIPAL 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, performs highly-advanced professional-level information technology support duties, including conducting comprehensive and complex systems design, analysis, and development; assumes responsibility for developing, directing, and ensuring operational availability, performance, and security of OC San's information technology operations and programs; serves as program/project lead; serves as business analyst for assigned departments; provides guidance, direction, and training to other Information Technology staff; and performs duties as assigned.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from assigned supervisory and/or managerial staff. Exercises no direct supervision of staff. Exercises technical and functional direction over and provides training to lower-level staff.

### **CLASS CHARACTERISTICS**

This classification is the fifth of five levels within the information technology job series responsible for performing the most complex, difficult, and responsible assignments, projects, analyses, and programs assigned requiring advanced knowledge of the concepts, practices, procedures, and policies of OC San information technology systems. Positions at this level provide technical and functional direction and leadership to assigned staff. Assignments at this level have significant impact on OC San's operations. Completed work is reviewed only from an overall standpoint in terms of feasibility, compatibility with other work, and/or effectiveness in meeting requirements and expected results. This class is distinguished from the Information Technology Supervisor in that the latter has full supervisory authority for planning, organizing, and overseeing the full scope of assigned information technology functions within the department.

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

*The following essential job functions are typical for this classification. Incumbents may not perform all of the listed job functions and/or may be required to perform additional or different job functions from those set forth below to address business needs and changing business practices.*

- Assumes responsibility for developing, directing, and ensuring operational availability, performance, and security of OC San's information technology systems and operations.
- Performs comprehensive systems analysis to design and develop new systems and enhancements to current systems; consults, confers, and coordinates activities with users, staff from various departments, outside agencies, and vendors to resolve program, system, operational, and procedural problems; analyzes problems and recommends corrective action.
- Plans, develops, and analyzes additions, changes, and enhancements to computer system software; researches, evaluates, installs, and implements new versions and releases for integration into existing

systems; determines impact on existing OC San systems and applications; troubleshoots, analyzes, and resolves hardware and software related problems; coordinates and documents testing procedures; works with division management to procure goods and services as needed.

- Installs and maintains new and upgraded software for database management systems; establishes procedures for database operation, control, and recovery.
- Provides, controls, grants, and revokes user access and ensures database availability; develops standards and strategies for maintaining database security and integrity; monitors users to ensure compliance with operational and security procedures; plans, designs, and implements highly complex databases and performs database management duties; designs, creates, maintains, and modifies database structure, tables, files, views, and indexes; manages database and file space allocation; makes recommendations on strategies to meet future storage requirements.
- Develops and administers strategies, policies, and procedures for network availability and security; designs and implements firewall strategies to ensure OC San data security and integrity.
- Serves as technical advisor in assigned systems area; provides and/or recommends solutions to other staff on a variety of technical problems.
- Serves as project manager on information systems projects; analyzes client information system needs; develops scopes of work, manages schedule and budget; 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; directs members of the project team; provides written reports and presentations on project status.
- Reviews system architecture and ensures OC San's current and future needs are addressed; evaluates new systems and technologies.
- Performs technical writing duties in the development and production of highly complex system documentation, instructional, and procedural manuals.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of information technology; researches emerging products and enhancements and their applicability to OC San needs.
- Organizes and assigns the work of lower-level staff; trains staff in work procedures; reviews work products and provides direction for difficult and/or complex assignments; 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; and develops and implements work improvements.
- Ensures safety and health procedures and precautions are adhered to, corrects unsafe work conditions/practices, and/or reports unsafe work conditions/practices to assigned supervisory or managerial staff.
- Performs duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles and practices of project management.
- Operations, services, and activities of a comprehensive information systems program.
- Advanced principles, practices, and methods of system design, development, analysis, testing, and security administration.
- Advanced principles and applications of critical thinking and analysis.
- Advanced methods and techniques of evaluating complex systems, identifying business requirements, and developing technical requirements and information systems solutions for strategic OC San systems.
- Methods and techniques of developing complex application technical user manuals and documentation.

- Recent and on-going developments, current literature, and sources of information related to the operations of the assigned programs.
- Advanced programming languages, job control languages, and executive control command methods and techniques.
- Advanced principles and practices of system software and hardware installation and troubleshooting.
- Functional structure of various operating system components, including system control programs and data access methods.
- Advanced concepts, principles, and practices of network design, development, protocols, security, and administration.
- Operations, services, and activities of a comprehensive database administration program.
- Advanced methods and techniques of developing data security, integrity, backup, and recovery processes.
- Advanced principles of database design, administration, management, and integrity; concepts of data planning, modeling, design, and storage; and operational characteristics of database support tools, servers, and communication devices.
- Principles of cross-functional business processes.
- Advanced methods and techniques of installing and maintaining network devices.
- Applicable federal, state, and local laws, codes, and ordinances relevant to area(s) of responsibility.
- Principles of providing functional direction and training.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Current equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

**Ability to:**

- Oversee and administer assigned programs and/or projects and promote the individual professional growth and development of less experienced staff; plan, organize, and coordinate the work of assigned staff; effectively provide staff leadership and work direction.
- Independently apply critical thinking and complex analysis to a broad range of situations and in decision making and problem solving.
- Resolve conflict through workable solutions and alternative approaches.
- Identify and implement effective course of action to complete assigned work; identify problems, research, and analyze relevant procedures, data, and information; research and monitor technical trends; develop and present recommendations and justification for solution to complex system problems.
- Direct and coordinate technical operations and services; serve as technical advisor and designated subject matter expert in assigned systems area.
- Recommend, evaluate, design, develop, test, and install complex operating systems, applications, and supporting hardware and software; troubleshoot and analyze complex network operating, hardware, and software problems.
- Plan, develop, establish, monitor, and maintain system quality assurance and security strategies in assigned systems area; develop database models and strategies to accommodate future data and OC San information technology needs.
- Establish and maintain effective and comprehensive technical and user documentation.
- Operate a motor vehicle to travel to various OC San sites, projects, and/or meetings.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
- Comply with safe work practices and procedures in the workplace.

- Provide a high level of customer service by effectively dealing with the public, vendors, contractors, and OC San staff.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Employment Standards:**

Any combination of education and experience that provides the required knowledge, skills, and abilities may be qualifying as determined by OC San.

1. Bachelor's degree from a college or university accredited by the U.S. Department of Education, with major coursework in computer science, information systems, or a related field.
2. Six (6) years of work experience in information systems or network programming and analysis.

**Licenses and/or Certifications:**

- Must possess a valid California Class C Driver's License.

**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**

- Mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and visit various OC San sites; this is primarily a sedentary office classification although standing in work areas and walking between work areas may be required; occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information; ability to lift, carry, push, and pull materials and objects up to 35 pounds.
- Vision to read printed materials and a computer screen.
- Hearing and speech to communicate in person and over the telephone.
- Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment.

**ENVIRONMENTAL ELEMENTS**

- 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.

**OTHER REQUIREMENTS**

- May be required to work extended hours, including nights, weekends, and holidays when necessary.
- Probationary Period: All OC San employees, except classifications considered "at-will", are subject to the probationary period provisions as specified in the applicable Memorandum of Understanding, policies, and/or resolutions. Employees who have not yet successfully completed their initial

probationary period serve “at-will” and may be released from employment without cause or recourse to any appeal or grievance procedures.

- Pre-Employment: All employment offers are contingent upon successful completion of OC San’s pre-employment process, which includes a background investigation, a physical examination, and a drug screen.
- Work Location Assignment: Employees will be assigned to a work location based on business needs which may be located at any/all of OC San locations; this work location may be changed at any time.