

DATA MANAGEMENT TECHNICIAN II

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 supervision, performs a variety of technical duties for a department in support of assigned geographic information system (GIS), computer-aided design (CAD), asset management, and related software application(s) and/or system components; conducts training for system users; responds to requests for assistance from system users and resolves operational problems; creates and runs reports, schedules, and/or maps for department staff; maintains electronic records and libraries; and performs duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory and/or managerial staff. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

This is the second of two levels within the data management job series responsible for performing the full range of duties as assigned, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. Work is normally reviewed upon completion and for overall results. This class is distinguished from the Information Technology Analyst class series in that the latter is responsible for performing professional-level duties ranging from routine to complex in-depth information technology assignments requiring business-planning expertise in one or more specific functional area(s) to which assigned.

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.

- Supports assigned departmental or enterprise software application(s) and system(s) maintenance, upgrade, and integration to leverage OC San's array of data management tools; captures mission critical data via computer, drone, and paper output for assigned department staff; develops and runs queries; provides technical expertise related to assigned system components and/or application.
- Maintains database(s), electronic records, and/or libraries for assigned function or program area.
- Prepares monthly, quarterly, annual, and other systems and/or operations reports and creates spreadsheets, maps, and/or computer-aided design (CAD) drawings/diagrams as required and requested.
- Develops and prepares training manuals and/or tutorials for assigned applications and systems; develops and conducts training in assigned area of responsibility.

- Participates in inter-agency and industry user groups to maintain awareness of improvements in industry practices in the assigned area of responsibility.
- Gathers aerial footage and photos by operating and maintaining drones; participates in planning, researching, and scheduling flights to ensure proper approvals and safe operations in accordance with Federal Aviation Administration regulations; reviews and edits videos and photos as needed.
- Provides customer service, responds to inquiries from staff and the public, and provides information and assistance within the scope of assignment.
- 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.

Geographic Information Systems (GIS) and Computer-Aided Design (CAD) Functions:

- Performs GIS development duties; participates in the translation of CAD files to GIS format including creation and attribution of relational data per data design standards; researches and analyzes consultant, OC San, and third-party project drawings to determine accurate geo-reference and attribution of data; versions, corrects, and updates Facility Atlas (FA) data.
- Performs GIS administration duties; maintains GIS database to ensure accuracy of data storage and retrieval for OC San GIS applications and products; administers FA application including integration with Engineering Data Management System (EDMS) and computer-aided design software; creates, updates, and maintains GIS and other related data in relational database; advises and assists Information Technology staff in creating database instances; initiates and monitors GIS data versioning and metadata; participates in the development, implementation, and administration of GIS standards, flow charts, and standard operating procedures to document work processes.
- Performs GIS support duties; creates and updates FA user guides; fulfills map requests; provides on-going FA user support; advises and assists Engineering and other departments on GIS issues including geographic positioning system (GPS) data collection and GIS data conversion, storage, and display; analyzes user needs to produce and oversee the production of maps, tables, charts, and reports for engineers and others in electronic formats or hard copy; works with staff to ensure accurate and effective presentation of information.
- Participates in reinvention related projects; creates new records; coordinates with OC San field staff, engineers, and consultants on diagrams, area reconciliation, and quality assurance/quality control spreadsheets; updates piping and instrumentation diagram (P&ID) and single line drawings and loops, as necessary for identification and upgrades; updates process and instrumentation diagrams and asset data records for projects and in-field modifications; rectifies any discrepancies in the field.
- Assists in the development of and documents CAD standards and creation of template files.
- Determines if plan submittals comply with OC San's CAD standards; flags deficiencies and assists in correcting drawings and drafting issues; maintains record of changes.
- Researches data and generates, reviews, and/or updates engineering CAD drawings and diagrams.
- Assists in developing change management procedures by working with staff and consultants to develop and test procedures for data request, engineering project data inputs, and FA data error tracking requiring changes to the GIS database; tracks project initiation, updates, and completion.
- Maintains, validates, and updates asset information for inventories and mapping.
- Performs basic systems software support; recommends installation of GIS-related software programs; participates in system upgrades and testing.

Asset Management System (AMS) Functions:

- Supports AMS software maintenance, upgrade activities, and system integration; gathers and administers information for asset creation; creates new asset records; updates the AMS system with quality-controlled equipment and instrumentation datasheets (EID); creates new numbers, codes, and descriptions; deletes unused numbers and records; creates loop numbers and loop tag numbers for assets; creates and deletes preventive maintenance schedules.

- Maintains AMS database for assigned function or program area; maintains system codes, asset information, and master loop and loop tag numbers.

QUALIFICATIONS

Knowledge of:

- Principles and practices of electronic data management systems, database concepts, AutoCAD, Geographical Information Systems (GIS), and/or work collaboration software.
- Work processes, operations, services, principles, methods, materials, activities, and technical aspects related to the functional area of assignment.
- Basic principles and practices of reading, understanding, and interpreting civil, mechanical, structural, electrical, or sanitary engineering plans, drawings, and schematics.
- Basic principles of surveying, operating drones, and coordinating systems.
- Electronic report-writing tools and data-extraction/manipulation languages (i.e., SQL).
- Operational characteristics of network systems including networking principles and protocols.
- Methods and techniques of operating and troubleshooting assigned systems and applications.
- Principles and practices used in establishing and maintaining files, record keeping, and information retrieval systems.
- Basic mathematics.
- 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:

- Perform a variety of technical duties in support of assigned systems and applications.
- Capture and maintain data pertaining to the assigned functional area.
- Provide training and support to system users.
- Respond to and identify user computer-related problems; troubleshoot and diagnose problems, and perform maintenance and repair duties for assigned hardware/software.
- Read, interpret, and understand a variety of computer instruction and training manuals and plans, schematics, technical manuals, diagrams, blueprints, and drawings.
- Understand and utilize dialog box options and program code structures.
- Digitize graphic data; convert coordinate systems and datum for automated maps in a variety of formats.
- Communicate technical information to a wide variety of users.
- Document procedures, guidelines, standards, and work products.
- Adapt to changing technologies and learn functionality of new equipment and systems.
- Perform mathematical calculations.
- Compile information and data from multiple sources; and prepare clear and concise reports.
- Independently organize own work, set priorities, and meet critical time deadlines.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.
- 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.

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. High school diploma or G.E.D., supplemented by specialized training or coursework in engineering, information systems, computer science, or a related field.
2. Three (3) years of increasingly responsible work experience in geographic information, computerized maintenance management, and/or related engineering data management systems.

Licenses and/or Certifications:

- If assigned to drone program, must possess a valid Remote Pilot Certificate issued by the Federal Aviation Administration.

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; 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.
- Occasional field work with exposure to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, and vibration.
- 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.