

CLASS SPECIFICATION



CLASS: Information Technology Analyst I/II
ALLOCATION: Administrative Services
FLSA STATUS: Non-exempt
UNION AFFILIATION: YCEA

ESTABLISHED: March 1996
REVISED: May 2019

JOB SUMMARY

Under general supervision, performs responsible analytical work related to the planning, design, implementation, evaluation, modification and maintenance in support of County computer systems, geographic information systems and telecommunication systems; performs analysis of customers requirements, procedures, and problems to automate or improve existing systems; reviews computer system capabilities, workflow and limitations; plans, coordinates and implements security measures for information systems to regulate access to computer data files and prevent unauthorized modification, destruction, or disclosure of information; analyzes, designs, tests and evaluates network systems; installs, configures, and supports the County's LAN, WAN, monitor network to ensure network availability to all system customers; coordinates changes to computer databases; converts project specifications and statements of problems and procedures into computer language; and performs related work as assigned.

Information Systems Analyst I is the professional entry-level classification in the Information Technology series. Initially under close supervision, incumbents learn County and departmental computer programs and systems, as well as, rules, policies and procedures. As experience is gained, assignments become more complex and are performed independently. This class is flexibly staffed with Information Technology Analyst II and incumbents may advance to the higher level after gaining sufficient experience and demonstrating proficiency to meet the requirements of the next higher level. Information Technology Analyst I's are typically assigned to a team rather than to particular projects.

Information Systems Analyst II is the professional journey-level classification in the information technology series, fully competent to perform all facets of the classification. This class is distinguished from the Senior Information Technology Analyst in that the latter has project management and lead direction responsibilities.

CLASS CHARACTERISTICS

Depending on the area of assignment this position may report directly to an Information Technology Manager or Supervisor. This class is distinguished from the Senior Information Technology Support Technician as the scope of responsibilities are focused on applications network systems analysis, or design and programming.

EXAMPLES OF DUTIES:

Essential:

Level I:

- Acts as a liaison to assigned County departments; meets with customer to resolve conflicts between system capabilities and customer requirements; explains cost, delays and impairment of overall system efficiency; suggests and justifies alternatives to customers' initial requests.
- Coordinates network operations, maintenance, repairs, or upgrades; monitors and analyzes network performance and data input/output reports to detect problems, identifies inefficient use of computer resources; participates in network technology upgrade or expansion projects, including installation of hardware and software and integration testing.
- Analyzes, designs, tests, and evaluates network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet and other data communications systems; diagnoses problems and replaces defective components.
- Investigates whether networks, workstations, the central processing unit of the system, or peripheral equipment are responding to a program's instructions; performs or refers revision, repair, or expansion of existing programs to increase operating efficiency or adapt to new requirements.
- Sets up customer accounts, regulating and monitoring file access to ensure confidentiality and proper use; maintains the peripherals, such as printers, that are connected to the network; identifies areas of operation that need upgraded equipment such as modems, fiber optic cables, and telephone wires.

- Performs data backups; performs routine network startup and shutdown procedures, and maintains control records.
- Maintains a variety of reports and documentation.
- Refers major problems to Information Technology Analyst IIs or vendors for service.

If assigned to Telecommunications (in addition to the Level I duties):

- Installs, maintains, and repairs digital and analog microwave radio, fixed and mobile radio, multiplexing, electronic and electromechanical key switching equipment and ancillary electronic/telephone equipment such as encoders, decoders, jacks, wiring, cables and power supplies.
- Climbs ladders, poles, towers, and structures to install, maintain, repair, or reconfigure radio communications or microwave antennas.
- Performs periodic tests on equipment to ensure compliance with Federal Communications Commission (FCC) rules and regulations and/or quality control directives.

If assigned to Geographic Information Technology (in addition to the Level I duties):

- Builds and updates digital databases.
- Checks all layers of maps in order to ensure accuracy, identifying and marking errors and making corrections.
- Determines scales, line sizes, and colors to be used for hard copies of computerized maps.
- Monitors mapping work and the updating of maps in order to ensure accuracy, the inclusion of new and/or changed information, and compliance with rules and regulations.
- Digitizes geographic data as assigned.

Level II (in addition to the above):

- Administers, analyzes, designs, modifies and maintains the County networks and related computing environments including computer hardware, systems software, applications software, and all configurations; recommends changes to improve systems and network configurations and determine hardware and software requirements related to such changes.
- Analyzes computer program specifications and determines the logical sequence; converts project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language; designs program flow charts and reviews logic; codes logic flow into appropriate language; conducts program and module testing and develops test procedures; creates data for test run; reviews test results for logic correctness and program requirement; debugs program.
- Writes, updates, and maintains computer programs or software packages to handle specific jobs such as tracking inventory, storing or retrieving data, or controlling other equipment; solves problems in programming arising from software interfaces, complex design requirements, and the use of new sophisticated computer languages; consults with customers to clarify program intent, identify problems, and suggests changes.
- Plans, coordinates and implements security measures to safeguard information in computer files against accidental or unauthorized damage, modification or disclosure and to meet emergency data processing needs; modifies computer security files to incorporate new software, correct errors, or change individual access status; monitors use of data files and regulate access to safeguard information in computer files.
- Assists with the management of the day-to-day operations of the County Intranet and Internet websites; designs, builds, or maintains web sites, using authoring or scripting languages, content creations tools, management tools, and digital media; writes, designs, or edits web page content, or directs other producing content; analyzes customer needs to determine technical requirements; creates web models or prototypes that include physical, interface, logical, or data models.
- Prepares bid proposals and cost estimates; recommends and coordinates vendor selection.
- Performs research, planning and cost studies in support of various current and future County system requirements; evaluates the feasibility and compatibility of modification on existing or new systems.
- Assists customers to diagnose and solve data communications problems; develops and writes procedures for installation, use, and troubleshooting of communications hardware and software; adapts and modifies existing software to meet specific needs.
- Recommends changes to improve systems and network configurations, and determine hardware or software requirements related to such changes; confers with network customers about how to solve existing system problems.
- Participates in computer systems disaster recovery plan maintenance and implementation.

- Maintains needed files by adding and deleting files on the network server and backing up files to guarantee their safety in the event of problems with the network.
- Researches new technology and recommends infrastructure modifications and implements such changes.
- Maintains accurate records and documents action taken; researches regulations, procedures, and technical reference materials.
- Prepares and maintains a variety of reports and documentation.
- Refers the more complex applications and network system issues to the Senior Information Technology Analysts.

If assigned to Telecommunications (in addition to the Level II duties):

- Plans, designs, implements, evaluates and modifies the County telecommunications systems including microwave radio, data transmission, telemetry, and the County telephone system; recommends and integrates new telecommunications equipment.
- Designs digital and analog systems, reconfigurations, and interfaces with common carrier, calculates path lost, prepares layout plans, technical drawings and circuit wiring diagrams; determines type, size, placement and supporting structure of antennas and power supplies.
- Develops system layout, wiring and modification diagrams; performs coverage tests and interference studies and investigates intermittent problems.
- Programs radio and telephone equipment needed.

If assigned to Geographic Information Technology (in addition to the Level II duties):

- Collects and evaluates information about specific features of the County using aerial photography and other digital remote sensing techniques.
- Revises existing maps and charts, making all necessary corrections and adjustments.
- Compiles data required for map preparation, including aerial photographs, survey notes, records, reports, and original maps.
- Inspects final compositions to ensure completeness and accuracy.
- Determines map content and layout, as well as production specifications such as scale, size, projection, and colors, and direct production to ensure that specifications are followed.
- Examines and analyzes data from ground surveys, reports, aerial photographs, and satellite images to prepare topographic maps, aerial-photograph mosaics, and related charts.
- Delineates aerial photographic detail such as control points, hydrography, topography, and cultural features using precision stereo-plotting apparatus or drafting instruments.

Important:

- Comply with all County equipment and safety policies and procedures, and California Occupational Safety and Health Administration (CalOSHA) rules and regulations.
- Assists in billing activities for computer equipment and supplies.
- Uses standard office equipment in the course of the work; uses hand and power tools to install hardware and cabling.
- May drive a personal or County motor vehicle in the course of the work to visit various departmental work sites.

EMPLOYMENT STANDARDS:

Knowledge of:

Level I:

- Electronic equipment, and computer hardware and software, including applications and programming.
- Design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- English language structure and content including the meaning and spelling of words, rules of composition, and grammar.
- Arithmetic, algebra, geometry, trigonometry, statistics, and their applications.
- Machines and tools, including their designs, uses, repair and maintenance.
- Principles and processes of providing customer service including, customer needs assessment, meeting

- quality standards for services, and evaluation of customer satisfaction.
- Administrative and clerical procedures and systems such as word processing, managing files and records, designing forms, and other office procedures and terminology.
- Safe work methods and safety regulations and precautions pertaining to the work.

Level II (in addition to the above):

- Electronic equipment, and computer hardware and software, including applications and programming utilized by the County.
- County and departmental operations, terminology, rules, policy and procedure.
- Principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

If assigned to Telecommunications (in addition to the Level II):

- Transmission, broadcasting, switching, control, and operation of telecommunications systems.
- Federal Communications Commission (FCC) rules and regulations governing the operation and repair of governmental radio transmitters and receivers.

If assigned to Geographic Information Technology (in addition to the II-Level):

- Raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
- Principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal and human life.

Skill in:

Level I:

- Reviewing information to determine appropriate cause of action.
- Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
- Generating or adapting equipment and technology to serve customer needs.
- Installing equipment, machines, wiring, or programs to meet specifications.
- Writing computer programs for various purposes.
- Determining causes of operating errors and deciding what action to take.
- Managing one's own time and the time of others.
- Working in a united team environment.
- Using mathematics to solve problems.
- Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.
- Keeping up-to-date technically and applying new knowledge to your job.
- Talking to others to convey information effectively.
- Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form.
- Performing maintenance on equipment and determining when/what kinds of maintenance/tools are needed.
- Operating hand and power tools related to the work.

Level II (in addition to the above):

- Analyzing and using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Identifying complex problems, analyzing the information and evaluating the results to develop and evaluate options and implement solutions.
- Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Analyzing needs and product requirements to create a design.
- Controlling operations of equipment or systems.
- Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.

- Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
- Understanding the implications of new information for current/future problem-solving and decision-making.
- Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Selecting and using training/instructional methods and procedures appropriate for the needs of the audience.

Ability to:

- Apply general rules to specific problems to produce answers that make sense.
- Recognize something is wrong or is likely to go wrong.
- Generate or use different sets of rules for combining or grouping things in different ways.
- Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
- Quickly and accurately compare similarities and differences among sets of letters, numbers, objects, pictures, or patterns. The things to be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object.
- Choose the right mathematical methods or formulas to solve a problem.
- Read and understand information and ideas presented in writing and verbally.
- Communicate effectively in writing and verbally as appropriate for the needs of the audience.
- Give full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Observe, receive and obtain information from all relevant sources.
- Maintain composure in difficult situations.
- Apply detail and thoroughness in completing tasks.
- Concentrate on a task over a period of time without being distracted.

Physical Demands: The physical demands and work environment described here are representative of those that must be met by the employee to successfully perform the essential function of the job, with or without accommodation. Prospective employees must complete a pre-employment medical exam (Occupational Group V) which will measure the ability to:

- Properly handle equipment and supplies weighing up the 25 pounds on routine basis.
- Properly handle equipment weighing up between 40 – 80 pounds, occasionally.
- See well enough to read fine print and view a computer screen; speak and hear well enough to understand, respond, and communicate clearly in person and on the telephone; independent body mobility sufficient to stand, sit, walk, stoop, and bend to access the work environment and a standard office environment; manual dexterity and sufficient use of hands, arms, and shoulders to repetitively operate a keyboard and to write; and the ability to sit or walk for prolonged periods of time.
- Perform physical activities that require considerable use of arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, kneeling, crouching and crawling.

Accommodation may be made for some of these physical demands for otherwise qualified individuals who require and request such accommodation.

Work Environment:

- May be required to work evenings, weekends and/or holidays as directed.
- May at times be exposed to loud noise levels. However, noise levels are typically quiet.

QUALIFICATIONS:

The minimum and preferred requirements are listed below. While the following requirements outline the minimum qualifications the County reserves the right to select applicants for further consideration who demonstrate the best qualifications match for the job. Meeting the minimum qualifications does not guarantee further participation in selection procedures:

Licenses and Certification:

Level I

- Obtain a valid California Class C driver's license within 10 days of employment.

Level II (in addition to the above):

- Prior to completion of probationary period, successfully complete one certification program as identified and determined by the department depending on the area of assignment: applications, operations or help desk.
- Ability to maintain the certification obtained during probationary period.

INFORMATION TECHNOLOGY ANALYST I

Education/Experience:

MINIMUM: An Associate's Degree from an accredited college or university in Computer Science, Management Information Technology or a field related to the work and two years of relevant (within the last five years) analytical network, applications and communications systems experience.

Candidates with strong experience who lack the education are encouraged to apply.

PREFERRED: In addition to the minimum, additional relevant analytical network, applications and communications systems experience in a public agency setting.

INFORMATION TECHNOLOGY ANALYST II

Education/Experience (in addition to the above):

MINIMUM: An Associate's Degree from an accredited college or university in Computer Science, Management Information Technology or a field related to the work and one year of experience at a level equivalent to the County's class of Information Technology Analyst I level. Prior to completion of probationary period, successfully complete one certification program as identified and determined by the department depending on the area of assignment: applications, operations or help desk. Ability to maintain the certification obtained during probationary period.

Candidates with strong experience who lack the education are encouraged to apply.

PREFERRED: In addition to the minimum, a Bachelor's Degree from an accredited college or university in Computer Science or Management Information Systems and additional relevant analytical network, applications and communications systems experience preferably in a public agency setting.

This class specification lists the major duties and requirements of the job. Incumbent may be expected to perform job-related duties other than those contained in this document.

Dept Approval:
Date:

EEOC: B
WC: 8810.

HR Approval:
Date:

Signature: _____

Signature: _____