CSC Adopted: October 2001, CSC Revised: July 2019

Class Title: Programmer/Analyst IV

BRIEF DESCRIPTION OF THE CLASSIFICATION:

Plans, designs, implements and evaluates computer application systems. Develops, tests, and maintains programs to meet needs of clients as determined by analyzing verbal and written requirements and specifications. Provides client support. Manages and coordinates projects. Provides system documentation.

ESSENTIAL FUNCTIONS:

This information is intended to be descriptive of the key responsibilities of the classification. The following examples do not identify all duties performed by any single incumbent. Specific requirements of individual positions are described in the Job Description.

	Physical Strength Code	ESSENTIAL FUNCTIONS
1	S	Manages and coordinates projects by prioritizing projects, monitoring progress, and resolving issues, analyzing situations and implementing solutions.
2	S	Determines client's requirements by attending meetings, learning the client's current processes, documenting the requirements, writing system and program specifications and obtaining client approvals.
3	S	Provides support to clients by conducting detailed analyses of process flows, producing feasibility and cost analyses, understanding multiple client's interactions, writing requests for proposals, training clients, developing and administering vendor contracts and preparing reports and presentations.
4	S	Develops new computer systems by designing, implementing, testing and debugging systems, assisting with network research and problem solving, maintaining and documenting computer programs using various computer languages, communicating with users before, during and after job completion, developing project definitions and system requirements, providing solutions to or enhancing the current system, analyzing, advising and assisting users in obtaining maximum effectiveness for their specific applications and performing system analysis on developed systems.
5	S	Supports the computerized integrated system by maintaining and monitoring current equipment, troubleshooting the failure equipment for hardware and software, designing, developing and testing new systems, evaluating the software and operating systems, meeting other departments regarding various data downloads, reporting requirements and system interfaces, reviewing, evaluating and making recommendations regarding software and providing programming, system and technical guidance.
6	S	Provides documentation by preparing detailed systems documentations for programs and procedures, documenting new and modified programs and preparing for new jobs, programs and schedules to be implemented into the production environment.
7	M	Installs, troubleshoots, and repairs the more complex process control computers; plant and distribution telemetry equipment; electronic/electrical control circuits; and other complex instrumentation activities utilized in the water treatment, distribution, and wastewater collection process.

	Physical Strength Code	ESSENTIAL FUNCTIONS
8	M	Installs, programs, & maintains SCADA, HMI, OIT, OPC, and performs emergency repairs.
9	S	Maintains network infrastructure, including but not limited to: routing, switching, encryption, wireless, network management, servers, network security, and physical transport layers (i.e. copper and fiber).

CLASS REQUIREMENTS:

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Formal Education / Knowledge	Work requires broad knowledge in a general professional or technical field. Knowledge is normally acquired through four years of college resulting in a Bachelor's degree or equivalent.
Experience	Three years experience as a programmer analyst.
Certifications and Other Requirements	Valid Driver's License may be required depending on assignment.
Reading	Work requires the ability to read technical manuals and journals, correspondence, software documentation, legal documents, policies and procedures and program code.
Math	Work requires the ability to perform general math calculations such as addition, subtraction, multiplication and division, algebra and accounting.
Writing	Work requires the ability to write system and client documentation, requests for proposals, contracts, system specifications and requirements, project plans, presentations, correspondence, various studies and reports, program code, and training materials.
Managerial	Managerial responsibilities include developing, implementing, and maintaining computer application systems, and coordinating activities of multiple clients and vendors.
Budget Responsibility	Prepares documents and does research to justify language used in documents for a unit of a department and may recommend budget allocations.
Supervisory / Organizational Control	Work requires functioning as a lead worker performing essentially the same work as those directed, and includes overseeing work quality, training, instructing, and scheduling work.
Complexity	Work is governed by broad instructions, objectives and policies. Work requires the exercise of considerable initiative and independent analytical and evaluative judgment.
Interpersonal / Human Relations Skills	Contacts others within the organization. These contacts may involve similar work units or departments within the City which may be involved in decision making or providing approval or decision making authority for purchases or projects. Works with individuals outside the City who may belong to professional or peer organizations. Working with various state and federal agencies may also be required. Vendors and suppliers may also be called upon for information on purchases, supplies or products. Meetings and discussions may be conducted with customers, brokers and sales representatives.

OVERALL PHYSICAL STRENGTH DEMANDS:

Sedentary X	Light	Medium	Heavy	Very Heavy
S = Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time	L = Light Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree.	M = Medium Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly.	H = Heavy Exerting 50-100 lbs. occasionally, 25-50 lbs. frequently, or up to 10-20 lbs. constantly.	VH = Very Heavy Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly.

PHYSICAL DEMANDS:

C = Continuously 2/3 or more of the time.	F = Frequently From 1/3 to 2/3 of the time.	O = Occasionally Up to 1/3 of the time.	R = Rarely Less than 1 hour per week.	N = Never Never occurs.

This is a description of the way the job is currently performed; it does not address the potential for accommodation.

PHYSICAL DEMANDS	FREQUENCY CODE	DESCRIPTION
Standing	F	Copier, fax machine, filing, inter-office, equipment installation, maintain and repair
Sitting	F	Computer, desk work, equipment installation, meetings, classes
Walking	O	Inter-office, to/from other departments, to/from customer locations
Lifting	O	Office supplies, office equipment, computer equipment, files, reports, books, pager
Carrying	O	Office supplies, office equipment, computer equipment, files, reports, books, pager
Pushing/Pulling	R	Printer paper, office equipment and furniture, installing toner and paper in printers
Reaching	O	Manuals, books, files, computer setups
Handling	O	Office supplies, office equipment, software, hardware, manuals, files, reports, books
Fine Dexterity	F	Computer keyboard, calculator, writing, typing
Kneeling	O	Computer setup and troubleshooting
Crouching	O	Computer setup and troubleshooting
Crawling	O	Computer setup and troubleshooting
Bending	O	Computer setup and troubleshooting, installing toner and paper in printers
Twisting	O	Computer setup and troubleshooting
Climbing	R	Step stool
Balancing	R	Step stool
Vision	C	Computer, desk work, reading, equipment installation
Hearing	C	Telephone, staff, supervisors, meetings, training
Talking	F	Telephone, staff, supervisors, meetings, training
Foot Controls	N	
Other (specify)	N	

MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:

Computer, laptop, laser or inkjet printer, copy machine, fax machine, telephone, computer components, small hand tools, cables and installation devices for computer, Standard Microsoft Windows and Office software. Electrical test equipment, Ladder, Pickaxe, Shovel, Radio antenna & cable, Fiber Optic cable & equipment, Electrical/communication cabling, Cellular devices & antenna, PLC & HMI Software.

ENVIRONMENTAL FACTORS:

D = Daily	W = Several Times Per Week	M = Several Times Per Month	S = Seasonally	N = Never

HEALTH AND SAFETY		ENVIRONMENTAL FACTORS		PRIMARY WORK LOCATION	
Mechanical Hazards	M	Dirt and Dust	D	Office Environment	X
Chemical Hazards	W	Extreme Temperatures	W	Warehouse	--
Electrical Hazards	D	Noise and Vibration	W	Shop	X
Fire Hazards	M	Fumes and Odors	D	Vehicle	X
Explosives	N	Wetness/Humidity	W	Outdoors	X
Communicable Diseases	W	Darkness or Poor Lighting	N	Other (see 2 below)	X
Physical Danger or Abuse	N				
Other (see 1 below)	N				

(1)
(2) Industrial Environments

PROTECTIVE EQUIPMENT REQUIRED:

Ear Protection   Safety Shoes
Eye Protection   Hardhat
Boots & Rain Gear   Gas Detection/Confined Space Training

NON-PHYSICAL DEMANDS:

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NON-PHYSICAL DEMANDS	
Time Pressures	F
Emergency Situations	R
Frequent Change of Tasks	F
Irregular Work Schedule/Overtime	O
Performing Multiple Tasks Simultaneously	F
Working Closely with Others as Part of a Team	F
Tedious or Exacting Work	F
Noisy/Distracting Environment	O
Other (see 3 below)	N

(3)