

CSC Adopted: October 2001, CSC Revised: April 2015; April 2017

## Class Title: Network Security Engineer

### **BRIEF DESCRIPTION OF THE CLASSIFICATION:**

Coordinates and maintains network and data security throughout the City's local and wide area networks; to include managing network firewall, intrusion prevention system, Internet web and email content filtering systems, and computer endpoint protection software. Develops and implements policies and procedures that pertain to aspects of network and data security. Monitors for intrusion and suspicious activity, user account and password violations, and security violations as it relates to data and network security. Coordinates security matters with departmental security liaisons.

### **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 network firewall, intrusion prevention and email protection systems. Implements hardware and OS software updates, makes rule and filter updates and modifications as needed. Monitors network for possible violations and suspicious activity.
2	S	Manages Internet Web Content filtering system. Makes necessary filter and rule modifications to protect against malicious activity and to ensure City policies are adhered to and enforced. Monitors web browsing activity reports for possible violations.
3	S	Manages endpoint protection system. Configures and deploys endpoint protection to City servers and computers. Monitors and remediates computer infections and intrusion events.
4	S	Manages the levels of data and application security. Plans, coordinates and implements security measures to regulate access to computer data files and prevent unauthorized modification, destruction, or disclosure of information.
5	S	Manages Active Directory user accounts. Creates, modifies and deletes user accounts, as needed.
6	S	Maintains security by coordinating security issues with departmental security liaisons, and developing and implementing standards, policies, and procedures pertaining to all aspects of network and data security.
7	S	Supervises security personnel in the administration of daily systems security.

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**CLASS REQUIREMENTS:**

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Formal Education / Knowledge	High School graduate or equivalent; specific vocational, administrative, or technical knowledge obtainable through six months to one year of advanced study or training past the high school level (through either city in-house training or an outside educational institution).
Experience	Three years of experience in an Information Technology related field or an equivalent combination of education and experience.
Certifications and Other Requirements	Valid Driver's License may be required depending on assignment
Reading	Work requires the ability to read technical manuals, policies and procedures and legal documents.
Math	Work requires the ability to perform general math calculations such as addition, subtraction, multiplication and division, algebra and statistics.
Writing	Work requires the ability to write technical instructions, policies and procedures, evaluations, contracts and various reports.
Managerial	Managerial responsibilities include determining departmental requirements and coordinating the implementation of solutions.
Budget Responsibility	Researches documents, compiles data for computer entry, and/or enters or oversees data entry and has responsibility for monitoring budget expenditures (typically non-discretionary expenditures) for a work unit of less than bureau size.
Supervisory / Organizational Control	Work requires supervising and monitoring performance for a regular group of employees in a work unit including providing input on hiring/disciplinary actions and work objectives/effectiveness, and realigning work as needed.
Complexity	Work is of the broadest scope dealing with highly complex concepts and issues of great importance to the City. Highly important policies, procedures or precedents are approved or rejected by individuals in this classification.
Interpersonal / Human Relations Skills	Contacts others within the organization concerning physical and logical security. 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, vendors and sales representatives.

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**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.
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*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	Filing, copier, fax machine, working on network equipment
Sitting	F	Computer, desk work, meetings, driving
Walking	F	Inter-office, to/from various servers
Lifting	O	Office supplies, files, manuals, network equipment, hand tools
Carrying	O	Office supplies, files, manuals, network equipment, hand tools
Pushing/Pulling	O	Boxes, cable
Reaching	O	Working on network equipment
Handling	F	Office supplies, files, manuals, network equipment, hand tools
Fine Dexterity	O	Computer keyboard, writing
Kneeling	O	Working on network equipment, installations, running cable
Crouching	O	Working on network equipment, installations, running cable
Crawling	O	Working on network equipment, installations, running cable
Bending	O	Computer operations, filing
Twisting	O	Working on network equipment, installations, running cable
Climbing	O	Stairs, ladders
Balancing	O	On stairs or ladders
Vision	C	Computer, desk work, reading, working on network equipment, driving
Hearing	C	Telephone, co-workers, supervisors, vendors, meetings
Talking	F	Telephone, co-workers, supervisors, vendors, meetings
Foot Controls	F	Driving
Other (specify)	N	

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**MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:**

Computer, Network computers, LAN meters, tone generators, network design software, network monitoring software, NT 2000, NT 2.0, screwdrivers, wrenches, scissors, knives, flashlights, pliers, Standard Microsoft Windows and Office software.

**ENVIRONMENTAL FACTORS:**

D = Daily	W = Several Times Per Week	M = Several Times Per Month	S = Seasonally	N = Never
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HEALTH AND SAFETY		ENVIRONMENTAL FACTORS	
Mechanical Hazards	N	Dirt and Dust	M
Chemical Hazards	N	Extreme Temperatures	N
Electrical Hazards	N	Noise and Vibration	M
Fire Hazards	N	Fumes and Odors	N
Explosives	N	Wetness/Humidity	N
Communicable Diseases	N	Darkness or Poor Lighting	M
Physical Danger or Abuse	N		
Other (see 1 below)	N		

PRIMARY WORK LOCATION	
Office Environment	X
Warehouse	--
Shop	--
Vehicle	--
Outdoors	--
Other (see 2 below)	--

- (1)
- (2)

**PROTECTIVE EQUIPMENT REQUIRED:**

Electrostatic straps, hard hat

**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	R
Other (see 3 below)	N

- (3)