# NC-XI, PART II VARIOUS CITY AGENCIES

# IT INFRASTRUCTURE ENGINEER

## **General Statement of Duties and Responsibilities**

This class of positions encompasses professional and responsible highly technical consultative responsibilities unique to the design and engineering of complex datacenters and networks. Under administrative direction of an agency IT manager, with broad latitude of independent action or decision, is responsible for the development of comprehensive infrastructure solutions. Engineer and operate mission critical infrastructure and be responsible for the access and protection of sensitive data, systems, and networks. Design and engineer components of New York City's proprietary network, CityNet. Lead a team or participate in a team in planning, designing, implementing and maintaining datacenter operations that includes the management of IT facilities, network, security, telecommunications, servers, storage and virtualization components. All personnel perform related work.

## Examples of Typical Tasks

Analyzes, designs, implements, documents and monitors infrastructure to maximize performance and capacity; ensures security and availability of data.

Plans, initiates and implements new infrastructure or design changes.

Plans, initiates and implements new solutions for cloud infrastructure, including network and system design and engineering.

Plans, defines and maintains standards and guidelines for efficiency, security, reuse, interoperability, availability, consistency and integration.

Define optimal performance level for infrastructure components and ensure that the level is met.

Monitors industry developments; liaises with vendor, as necessary. Ensures compliance with agency standards.

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## IT INFRASTRUCTURE ENGINEER (continued)

#### Examples of Typical Tasks (continued)

Assists with application development regarding new technologies and system requirements.

Identifies probable system problems or design flaws and escalates issues to upper management before serious performance impact.

Define, manage and monitor data retention, replication, data protection, and disaster recovery strategies, to ensure proper recoverability.

Serves as subject matter expert on topics related to networks, servers, storage and virtualization; provides training.

Manages inventory of IT hardware and software assets.

Liaises with relevant stakeholders to ensure availability of infrastructure solutions.

Maintains disaster recovery configurations for infrastructure, perform periodic disaster recovery test and maintain disaster recovery documentation and procedures in support of infrastructure.

Works closely with various IT teams to resolve infrastructure issues.

Ensures that all changes to the infrastructure adheres to established Change Management policies and procedures.

Manages network or infrastructure engineering for cloud solutions.

Prepares system configurations and management/support documentation.

Assists in the development and review of technical specifications for the procurement of relevant IT systems and services, including the evaluation of vendor submissions solicited via bids, requests for information and proposals.

## IT INFRASTRUCTURE ENGINEER (continued)

## Examples of Typical Tasks (continued)

May oversee multiple projects and supervise employees.

## **Qualification Requirements**

- 1. A baccalaureate degree from an accredited college in computer science, engineering or a related field and four years of satisfactory full-time experience related to datacenter engineering and operations, cloud engineering and operations, complex IT infrastructure engineering; or,
- 2. A baccalaureate degree from an accredited college and eight years of satisfactory fulltime experience related to datacenter engineering and operations, cloud engineering and operations, complex IT infrastructure engineering; or,
- 3. Education and/or experience which is equivalent to "1" or "2" above.

## **Direct Lines of Promotion**

**None.** This class of positions is classified in the Non-Competitive Class.