

NETWORK ENGINEER II

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision, an incumbent of this position, located in the Department of Information Technology or at the Westchester Community College, is responsible for the installation, maintenance and relocation of network and associated equipment. This process also includes the installation of all network equipment software. Incumbents may be assigned to any departmental work shift and provide support services to various departments utilizing automated systems. This class differs from the lower level Network Engineer I in that the Network Engineer II is involved in project planning and systems integration issues; managing and configuring “enterprise” level tools which impact county-wide operations as opposed to single entities; and managing projects from beginning to end, rather than separate elements or tasks of a project. This class is further distinguished from the Network Engineer I by the level of independence exercised in the performance of work assignments, the complexity of these assignments, and the advanced level of troubleshooting involved in finishing an assignment. Incumbents also regularly lead and guide other staff in the performance of more specialized projects. While guidance and leadership is provided, supervision is not a responsibility of this position. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Works on specialized, complex assignments relating to the installation and relocation of hardware and software for network equipment, including assembly, configuration and transport, in accordance with established procedures and instructions;

Implements best security practices in accordance with established procedures and instructions;

Works independently or with higher level manager on systems integration issues involving specialized hardware and software;

Administers, configures and manages tools and applications that operate on the “enterprise” level, affecting county-wide operations;

Performs periodic preventative maintenance in accordance with manufacturer recommendations and departmental standards;

Prepares network and associated equipment for installation;

Modifies, updates and replaces internal network equipment parts as required;

Modifies, updates and replaces network equipment software as required;

Lifts network equipment that may weigh as much as 50 lbs. to place in, arrange around, or remove from the workplace for set-up, installation, repair, de-installation, or maintenance;

Responds to maintenance service requests related to network equipment;

EXAMPLES OF WORK: (Illustrative Only) (Cont'd)

Assists with the design of global network standards including communications protocols, security standards and related procedures;

Receives user calls regarding network-related problems and performs the appropriate action to resolve the problem;

In consultation with higher level managers, plans and assigns tasks to subordinate staff;

Performs diagnosis of failures to determine whether they are induced by network software or hardware;

Assists with the preparation of network documentation, specifications, standards, instructions and user manuals as needed;

Assists with the development and implementation of security standards and protocols to ensure systems are accessible only by authorized users

Notifies appropriate Information Technology staff of software or hardware failures and performs diagnostics;

Works with contract and vendor supplied personnel engaged in the installation, maintenance and repair of network hardware and software;

Maintains operating records and prepares routine operating reports;

Informs supervisor as to the status of all operating problems;

Assists in managing inventory of network and associated equipment;

Uses computer applications or other automated systems such as spreadsheets, word processing, Visio Diagrams, calendar, email and network management software in performing work assignments;

Accesses protected health information (PHI) in accordance with departmental assignments and guidelines defining levels of access (i.e., incidental vs. extensive);

May train and schedule subordinate staff and evaluate their performance to inform management of employee progress;

May perform other incidental tasks, as required.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Good knowledge of the components, operation, maintenance and repair of network equipment; good knowledge of data communications and basic electronics terminology; good knowledge of standard communications protocols; knowledge of basic computer communications software; skill and dexterity in the use of tools; ability to communicate

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES (cont'd):

with outside vendors on equipment and related problems; ability to think logically; ability to comprehend complex technical materials and understand basic wiring diagrams; ability to see all colors of wire for connection purposes; ability to assign and review the work of others; ability to communicate clearly, both orally and in writing; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential duties of the position; ability to move equipment and supplies; ability to understand and carry out written and oral directions; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential functions of the position; good judgment; initiative; resourcefulness; reliability; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE:

A high school or equivalency diploma and either (a) a Bachelor's degree* in Information Technology or a closely related field and three (3) years of experience where a primary function of the position was the installation, operation, maintenance and problem diagnosis of network equipment including routers and switches; or (b) current CCNP (Cisco Certified Network Professional) certification and three years of experience as described in (a); or (c) eight (8) years of experience as described in (a).

SUBSTITUTIONS:

Satisfactory completion of 30 credits* may be substituted on a year for year basis for up to four years of the required experience. A Master's Degree* in Information Technology or a closely related field may also be substituted for one additional year of experience.

SPECIAL REQUIREMENTS:

Possession of a valid license to operate a motor vehicle in the State of New York at time of appointment and maintain same while in the title.

NOTES:

1. *Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Department of Education as a post-secondary, degree-granting institution.
2. Experience on a home personal computer may not be used as a substitute for the aforementioned experience.