

## **ACADEMIC NETWORK ADMINISTRATOR**

### **DEFINITION**

Under general supervision, assists in the planning, coordination, and implementation of the activities, operations, and duties in support of network administration for an academic division within the District; implements new systems, programs, and hardware and software upgrades; monitors and maintains network security; coordinates assigned activities within the division and with other departments and outside agencies; provides technical and complex staff assistance to division management and the Assistant Director, Academic Technology and Infrastructure.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Assistant Director, Academic Technology and Infrastructure. Exercises technical and functional direction over and provides training to technical staff assigned to an academic division.

### **CLASS CHARACTERISTICS**

This class is responsible for designing, planning, implementing, and maintaining an academic division's computer network infrastructure, including hardware, operating systems, and desktop/network applications. Responsibilities include maintaining network firewalls, routers, and switches, administering directory service systems, and providing technical support to division staff. Successful performance of the work requires extensive knowledge of information technology infrastructure, systems, operations, maintenance, and repair. This class is distinguished from the Enterprise Network Administrator II in that the latter plans, coordinates, and implements activities, operations, and duties in support of the District's enterprise-wide information technology network. This class is distinguished from Assistant Director, Academic Technology and Infrastructure in that the latter has full management and supervisory responsibility for planning, organizing, and directing the full scope of operations within the assigned division.

### **EXAMPLES OF ESSENTIAL JOB FUNCTIONS** (Illustrative Only)

1. Installs, configures, manages, and maintains multiple physical and virtual servers, workstations, and terminals, ensuring proper integration of these components with existing system architecture.
2. Provides support, guidance, assistance, training, and instruction to end-users in the use of computer systems, peripheral devices, software, and related technology used in the assigned division.
3. Confers with Information Technology staff, system programmers and analysts, and division faculty to analyze application difficulties and plan new and upgrade existing network installations to ensure efficient and effective operations are in place and maintained; works with contractors, design consultants, architects, and campus facilities staff to plan, coordinate, and implement technology related projects.
4. Coordinates technical support staff; generates schedules and specific details for assignments.
5. Maintains and troubleshoots networks, systems, workstations, and applications to identify and correct malfunctions and other operational problems.
6. Monitors the performance of the network system; optimizes & tunes operating systems to resolve performance issues, troubleshoots network connectivity problems; tracks possible problem areas affecting response time and prepares recommendations for correction of problems and improvement in performance.
7. Works with vendor representatives to identify and correct causes of hardware and software malfunctions and to perform enhancements, obtain quotes and pricing for computer hardware, software, supplies, and services; coordinates the work of outside consultants.

8. Implements new systems, programs, and hardware and software upgrades; supports technical requirements of software for users; identifies, analyzes, and resolves software and network problems.
9. Implements, monitors, and maintains network security for the division; ensures proper user accessibility; creates and manages user storage locations allocating appropriate security to shared resources.
10. Maintains enterprise computer applications on various servers such as Active Directory Lightweight Directory Access Protocol (LDAP) deployment, including creating and managing organizational units, user accounts and groups, and computer groups; assigns security permissions to organizational units, user accounts and groups, and computer groups.
11. Develops and implements backup policies and procedures; performs system backups.
12. Installs, configures, and maintains all hardware and software, including switches, routers, and firewalls, for functionality and security.
13. Stays abreast of new trends and innovations in technology related to the assigned division; researches and identifies opportunities for improving classroom instruction; implements improvements; works with division staff to maintain, revise, or improve the information technology operations.
14. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
15. Performs other related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

1. Principles and practices of information technology local area and wide area network administration, network security policies and procedures, backup procedures, and information systems pertaining to assigned District division or department.
2. Network systems analysis and troubleshooting principles and procedures.
3. Computer hardware and software applications, including network essentials, peripheral equipment, and network security.
4. Design, operations, properties, and capabilities of networks and network cabling.
5. Operating characteristics, capabilities, and limitations of computers and related peripheral equipment.
6. Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned functions and responsibilities.
7. Research techniques, methods, and procedures.
8. Technical report writing practices and procedures.
9. Principles and procedures of record-keeping and reporting.
10. Modern office practices, methods, and computer equipment and applications related to the work.
11. English usage, spelling, vocabulary, grammar, and punctuation.
12. Techniques for providing a high level of customer service by effectively dealing with the public, vendors, students, and District staff, including individuals of various ages, disabilities, socio-economic and ethnic groups.

### **Skills & Abilities to:**

1. Analyze network practices and operations and develop solutions.
2. Troubleshoot and diagnose specific problems with the network, computers, and associated equipment.
3. Provide recommendations on new or existing network and computer hardware and software systems.
4. Operate, install, maintain, configure, and troubleshoot a variety of computer equipment and peripherals.
5. Perform computer information system network installation, repair, and maintenance work.
6. Use network operating systems such as Windows, Linux, and Apple OSX in multi-tiered network environments.

7. Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.
8. Interpret, apply, explain, and ensure compliance with applicable Federal, State, and local policies, procedures, laws, and regulations.
9. Prepare and maintain accurate and complete records, clear and concise reports, and technical documentation.
10. Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
11. Operate modern office equipment including computer equipment and specialized software applications programs.
12. Use English effectively to communicate in person, over the telephone, and in writing.
13. Understand scope of authority in making independent decisions.
14. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
15. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Education and Experience:**

*Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Equivalent to an Associate's degree from a regionally accredited college with major coursework in computer science, information technology, or a related field, and three (3) years of responsible network administration, technical customer support, or related experience.

**Licenses and Certifications:**

- The incumbent may periodically be required to travel to a variety of locations. If operating a vehicle, employees must have the ability to secure and maintain a valid California driver's license.

**PHYSICAL DEMANDS**

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily an office classification although standing and walking between work areas is required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds with the use of proper equipment and occasionally heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees work in an office environment and outdoors with exposure to high noise levels and dust and allergens. Employees may interact with staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.