



management, and administrative control of four functional areas: Networks, Systems Administration, Operations, and Communications Services.

#### 4. Duties and Responsibilities.

(List essential functions (primary duties) of the position.)

Major responsibilities include:

- A. Manages the connection of new buildings to the campus voice and data networks.
- B. Provides management of the MSU—Bozeman LAN and of the WAN connections for all MSU campuses in the areas of technical operations, maintenance, administration, and support.
- C. Provides management of server computer systems under ITC's responsibility in the areas of technical operations, maintenance, administration, and support.
- D. Provides technical consultation on network and central computer issues to faculty, staff, administration, students, and others as required. Provides ITC technical standards definitions and position statements to the MSU network and computer communities.
- E. Proposes technology solutions required to meet current and future needs of the MSU computing and networking communities and environments in relation to the mission of the University and in relation to defined or emerging *de facto* industry standards.
- F. Proposes technology that addresses the integration and management of all digital communications within the network in relation to the mission of the University and in relation to defined or emerging *de facto* industry standards.
- G. Provides technical consultation about and support for systems involved in the use of telecommunications to deliver university services remotely.
- H. Provides direct day-to-day management of the ITC Network Systems and Operations staff.
- I. Provides MSU management of vendor-based higher education Information Technology programs.
- J. Participates in technical committees, technical staff meetings, procurement processes, seminars, user-group meetings, and other telecommunication events as appropriate at the levels of the MSU-Bozeman campus, the four MSU campuses, the Montana University System, and the State of Montana.
- K. Assists in the responsibilities and activities of other ITC units and unit managers when needed/required.
- L. Represents MSU in national, regional, state, and local networking and computing conferences. Provides technical representation for MSU at vendor meetings, user groups, and other events.

- M. Provides technical consultation to construction and remodeling project management and oversees specifications and designs to ensure adequate voice and data cabling capacity.

## 5. Work areas or assignments.

(Describe areas over which the employee exercises independent authority, judgment, initiative and discretion)

- A. Networks (3FTE, plus students)—Design, development, and management of the campus data networks. Responsible for the campus fiber backbone, building network wiring, routers, hubs, firewalls, server connections, and remote access. Provides technical backup to Helpdesk in the area of desktop computer and server network applications. Responsible for MSU connections to external networks including the Montana University System Network (MUSNet), the State of Montana's Summitnet, the commodity Internet, and Internet 2. Responsible for assisting other Montana State University (MSU) campuses with their internal networks and their connections to external networks. Responsible for assisting other Summitnet institutions with their connections to that network.
- B. Systems Administration (7 FTE, plus students)—Development and management of the MSU central server environment. Includes responsibility for shared resources used for administrative, research, and instructional computing as well as general network applications such as electronic mail, newsgroups, Web services, and so forth. Administration of compute-, file-, print-, Web-, and other servers currently running VMS, Unix, Linux, and Microsoft Operating Systems.
- C. Communications Services (8 FTE, plus students)—Design, development, and installation of campus data and voice cable plants. Ensures capacity for data and voice wiring of all new construction and remodeling projects on campus. Researches and recommends best practices for integration of emerging communications technology.
- D. Operations —Through dotted-line reporting relationship with Help Desk and Operations Support within the Sales and Support Services unit, shares responsibility to oversee operations of networked, computer systems, including centrally managed systems and, to a lesser extent, distributed systems and their associated hardware and network devices. Shares responsibility to oversee production control for administrative applications and manages printing services for central computers.

## 6. Extent to which the person in this position is responsible for:

developing & implementing policies  
establishing goals for the work unit and/or University  
control of personnel use, equipment and/or funds

The Network Systems and Operations Director is responsible for maintaining that unit as an integral part of ITC, and for ensuring that its personnel provide customer-oriented service in their interactions with customers internal and external to ITC.

This position manages supervisors in the Network Systems and Operations unit, and must interact directly and effectively with ITC administration, other Directors, as well as faculty, staff, and administration throughout the four campuses.

This position will interact daily with faculty and staff having a wide variety of computing and telecommunications needs and equally diverse levels of user expertise; will interact with management and professional staff in the daily coordination of unit activities which may include policy and procedure development, project coordination, customer service analysis, and preparation of special reports; will interact with clientele daily regarding services and timelines or for conflict resolution, problem solving, and customer relations activities; and with vendors periodically for contract negotiations and execution and planning of training sessions, user group meetings, product demonstrations, and so forth.

The Network Systems and Operations Director has authority to speak and act for ITC in matters of customer relations, contract negotiations, product and service availability, pricing, and maintenance. Major fiscal and administrative responsibilities include contract negotiation, budget development and execution, strategic planning, staff training, and maintaining ITC standards for infrastructure-related products and services.

Major work assignments will be consistent with ITC and Network Systems and Operations unit goals and will be assigned by the Director. Priorities and daily activities will generally be self-regulated, with informal weekly progress reports provided to the ITC management team. Work will be reviewed by the ITC CIO, as well as via input from established user groups, key customers, and Network Systems and Operations staff.

Decisions and commitments affect ITC and the entire computer and network user communities at MSU-Bozeman as well the three other MSU campuses, both fiscally and functionally. Virtually all functions of the university are enabled and impacted by the ITC-managed voice and data networks and computer system infrastructure. Availability, stability, reliability, cost-effectiveness, and currency of the networks and attached systems are all critical to the mission of the University. Policies and procedures of the ITC Network Systems and Operations unit are under the scrutiny of the MSU Internal Auditor and the State of Montana's Legislative Audit Division and must conform to the expectations of those units. Staff in the Network Systems and Operations area must be managed such that their services are of the highest quality possible.

## 7. Minimum educational and experience requirements for the position.

(Include specialized training or supervisory experience required, as well as applicable professional certification or licenses.)

- A bachelor's degree in a technology-related field such as computer science, electrical engineering, or telecommunications technology
- A record of success in progressively more responsible positions in information technology
- A record of success in progressively more responsible positions managing a diverse group of professional-level technical staff
- Excellent oral and written communications skills
- A record of successful leadership in planning and implementing technological and managerial initiatives in an open, inclusive, participative environment

## 8. Required and Preferred Qualifications

("Required qualifications" refers to the minimum and "must have" education and experience standards for an applicant to be considered. "Preferred qualifications" refers to standards that will improve an employee's ability to perform the duties and responsibilities of the position and enhance their performance.)

Preferred qualifications include:

- Successful technical and managerial experience in a higher education environment
- A masters degree in a field related to the position

## 9. Knowledge, Skills and Abilities.

(Focus on results-oriented accomplishments, i.e. skill in use of Microsoft software; ability to work cohesively and productively in a team-oriented environment; knowledge of MSU policies and procedures. etc.)

This position requires the ability to manage and develop technical staff support skills that will allow the three diverse groups of staff in the unit to function as a team, working toward shared goals, where individual efforts complement group efforts. The Director must possess a thorough knowledge of network and system management and operations issues, information technology in general, and higher education IT issues. Must have an awareness of product development, evaluation, and marketing cycles and practices relating to the IT industry. Must be able to communicate effectively with a variety of clientele, orally and in writing. Must possess and foster within the Network Systems and Operations unit a clear understanding of a customer-driven service enterprise. Must be customer oriented and able to engage others in the unit in accepting and

developing a customer-service orientation in all aspects of the operation.

## 10. Additional Information

( List any unusual requirements for the position such as: repetitive movements; extensive standing or sitting; lifting requirements; possess or have the ability to obtain a Montana Drivers License, etc.)