

### **3.13 Computer Systems Administrator**

#### **Summary of Duties**

This position is responsible for administering computer systems supporting multiple users in the School of Design and Construction. This position also acts as the enterprise Network Architect for VCEA, including the physical and virtual network design, implementation, and maintenance. This position is responsible for researching, designing, and implementing of security procedures and rules for area boarder and internal network firewall(s) for multiple agencies within area. Additionally, this position provides expert consultation and specialized analysis, design, development, and problem resolution on a variety of issues within VCEA.

#### **Project Oversight (15%)**

- Develops and implements project plans and designs complex agency- or institution level, enterprise systems.
- Coordinates and implements complex installation projects for major systems that carry out organization-wide information functions.
- Sets and maintains project schedules, coordinates design/maintenance and testing.
- Assigns and directs staff.
- Ensures standards are met (quality assurance).

#### **Enterprise Systems (20%)**

- Oversees the daily operations of large-scale or enterprise systems.
- Identifies and independently resolves operational problems for major systems that have high risk/high impact.
- Supports, maintains, and enhances existing, high risk and impact, mission critical applications.
- Analyzes and resolves very complex problems such as multiple product problems, dump analysis, or major conflicts caused by a new hardware or software version.

#### **System Administration (40%)**

- Perform systems analysis and programming at the highest technical level in developing and maintaining systems which support the datacenter and labs.
- Develop, plan and implement college wide system/service installation, configuration and maintenance.
- Manage and audit users, roles, permissions, and groups within the enterprise systems.
- Conduct capacity planning to determine organization-wide needs including analyzing and assessing industry direction and new capabilities that may be applied to the organization, and evaluating new products, documenting characteristics, and making recommendations.
- Performs system testing and other testing depending on system complexity, risk and impact.
- Performs quality assurance efforts.
- Develops and issues standards and processes including reporting, testing, and evaluation.
- Analyze industry-wide trends and make recommendations for improvements and efficiencies in system performance.

**Application (20%)**

- Plans, analyzes, and develops requirements for application development and enhancement.
- Develops alternative solutions and makes recommendations.
- Creates and supports pre-production environments such as tests, demos, and production runs for major systems.
- Supports, maintains, and enhances database management system, and may install vendor and support software.
- Plans for database growth and space requirements.
- Establishes performance measures for database management systems, analyzes problems, makes recommendations for improvements, and implements tuning adjustments.
- Analyzes recovery scenarios and develops on-site backup requirements.
- Defines and implements on-site backup and recovery procedures and schedules.