# Systems Analyst - Job Description

### **ESSENTIAL FUNCTIONS**

The Systems Analyst (SA) is responsible for effective provisioning, installation/configuration, operation, and maintenance of systems hardware and software and related infrastructure. The Systems Analyst participates in technical research and development to enable continuing innovation within the infrastructure. SA ensures that systems hardware, operating systems, software systems, and related procedures adhere to university needs to offer efficient study and learning environment for staff and students.

SA will assist project teams with technical issues in the Initiation and Planning phases of standard Project Management Methodology. These activities include the definition of needs, benefits, and technical strategy; research & development within the project life-cycle; technical analysis and design; and support of operations staff in executing, testing and rolling-out the solutions. Participation on projects is focused on smoothing the transition of projects from development staff to production staff by performing operations activities within the project life-cycle.

Systems Analyst is accountable for the following systems: Windows systems and VMWare systems that support virtual infrastructure and software; Windows and Application systems that support Attache', student management system, staff and students' emails, students' Moodle system and Library systems (Koha and DSpace). Responsibilities on these systems include SA engineering and provisioning, operations and support, maintenance and research and development to ensure continual innovation.

# **SA Engineering and Provisioning**

- 1. Engineering of SA-related solutions for various project and operational needs.
- 2. Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements.
- 3. Install and configure systems such as supports physical and virtual servers and associated software applications.
- 4. Develop and maintain installation and configuration procedures.
- 5. Contribute to and maintain system standards.
- 6. Research and recommend innovative, and where possible automated approaches for system administration tasks. Identify approaches that leverage SINU resources and provide economies of scale.
- 7. Other duties as directed by ICT Manager.

## **Operations and Support**

- 1. Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources, systems and key processes, reviewing system and application logs, and verifying completion of scheduled jobs such as backups.
- 2. Perform regular security monitoring to identify any possible intrusions.
- 3. Perform daily backup operations, ensuring all required file systems and system data are successfully backed up to the appropriate media, recovery media, create disks and media is recycled and sent off site as necessary.
- 4. Perform and maintain regular file archival and purge as necessary.

- 5. Create, change, and delete user accounts on demand/request.
- 5. Provide Tier support as per request from various schools and departments. Investigate and troubleshoot issues.
- 6. Repair and recover from hardware or software failures. Coordinate and communicate with impacted schools and departments.
- 7. Other duties as directed by ICT Manager.

### Maintenance

- 1. Apply OS patches and upgrades on a regular basis, and upgrade administrative tools and utilities. Configure / add new services as necessary.
- 2. Upgrade and configure system software that supports physical and virtual infrastructure applications or Asset Management applications per project or operational needs.
- 3. Maintain operational, configuration, or other procedures.
- 4. Perform periodic performance reporting to support capacity planning.
- 5. Perform ongoing performance tuning, hardware upgrades, and resource optimization as required. Configure CPU, memory, and disk partitions as required.
- 6. Maintain data center monitoring equipment.
- 7. Other duties as directed by ICT Manager.

# **KNOWLEDGE AND SKILLS**

The applicant must have at least five (5) years knowledge and experience in:

- 1. VMWare,
- 2. Networking and Server Configuration & Implementation,
- 3. Vulnerability and Risk Assessments,
- 4. Network Security Audits & Digital Forensics,
- 5. Malware Analysis & Sandboxing,
- 6. MSSQL/MySQL,
- 7. Linux,
- 8. SpiceWorks (Helpdek),
- 9. Web Technologies & Frameworks (HTML, CSS, JS, MongoDB, PHP, React, Ionic, Angular) etc.

# **EDUCATIONAL QUALIFICATIONS, KNOWLEDGE AND SKILLS**

- 1. The applicant must be a graduate in Bachelor degree in engineering or computer science and preferable a Post Graduate Diploma in computer science. relevant field is preferable with at least five (5) years field experience in related field.
- 2. The incumbent must hold specialized certificate in:
  - Network Security and Linux Administration,
  - Cisco CCNA Cyber Ops.
  - Cisco CCNA Routing and Switching,

- User Centric Design
- Software Testing & Quality Assurance
- Network Engineering

## COMPLEXITY/PROBLEM SOLVING

Position deals with a variety of problems and sometimes has to decide which answer is best. The question/issues are typically clear and require determination of which answer (from a few choices) is the best.

### DISCRETION/LATITUDE/DECISION-MAKING

Decisions normally have a noticeable effect department-wide and university-wide, and judgment errors can typically require one to two weeks to correct or reverse.

## **RESPONSIBILITY/OVERSIGHT - FINANCIAL & SUPERVISORY**

- 1. Functions as a lead worker doing the work similar to those in the work unit; responsibility for training, instruction, setting the work pace, and possibly evaluating performance.
- 2. No budget responsibility.

### COMMUNICATIONS/INTERPERSONAL CONTACTS

- 1. Interpret and/or discuss information with others, which involves terminology or concepts not familiar to many people; regularly provide advice and recommend actions involving rather complex issues. May resolve problems within established practices.
- 2. Provides occasional guidance, some of which are technical.

### WORKING CONDITIONS/PHYSICAL EFFORT

- 1. Responsibilities sometimes require working evenings and weekends, sometimes with little advanced notice.
- 2. Regular travels may be required.