The KCMC University is a newly full-fledged University owned by the Good Samaritan Foundation. The University trains health professionals for various University awards in clinical, biomedical and allied health sciences. It currently wishes to recruit competent and committed human resources to fill the following vacant positions within the Information and Communication Technology (ICT) Department.

# 1. Senior ICT Officer Grade III (Software Development) – 1 Position

**Working Experience:**

At least **three (03) years** of experience in software development or systems administration in an academic or enterprise environment, specifically:

**(a) Experience with Higher Education Systems:**

1. Familiarity with common university systems such as Student Information Systems (SIS), Learning Management Systems (LMS) (e.g., Canvas, Blackboard, Moodle), and Enterprise Resource Planning (ERP) software.
2. Knowledge of academic scheduling systems, grading systems, and campus management solutions.

**(b) Data Science or Analytics:**

1. Experience with data analytics, building dashboards, or working with business intelligence tools (e.g., Power BI, Tableau).
2. Knowledge of data science techniques (e.g., Python with Pandas, NumPy) to support research and reporting needs in an academic environment.

**(c) Integration with Administrative or Academic Research Tools:**

1. Experience integrating systems with academic research tools (e.g., institutional repositories, research management software).
2. Familiarity with APIs and webhooks used by research databases, such as ORCID, Google Scholar, and PubMed.

**1.3     Knowledge, Technical Skills and Abilities:**

**1.3.1   Technical Skills:**

1. **Programming Languages:** Proficiency in at least one programming language such as Python, Java, C#, PHP, or Ruby.
2. **Database Management:** Experience with relational (SQL Server, MySQL) and non-relational databases (NoSQL).

- **Web Development:** Experience with front-end technologies (HTML, CSS, JavaScript) and back-end frameworks (Node.js, Django, ASP.NET).

1. **System Integration:** Knowledge of API development and integrations, working with RESTful APIs, web services, and middleware.
2. **Version Control:** Experience with Git for version control.
3. **Operating Systems:** Proficiency in Linux, Windows, and macOS environments.

**1.3.2   Soft Skills and Abilities:**

1. Strong problem-solving abilities and attention to detail.
2. Excellent communication skills to collaborate with both technical and non-technical staff.

- Ability to prioritize tasks and manage time effectively.

1. Demonstrated ability to work in a team-oriented environment, with experience mentoring junior developers or support staff.
2. Strong analytical and troubleshooting skills.

1. **Duties and Responsibilities:**
2. Design and Develop Software: write, test, and maintain software applications based on uuniversity
3. Write efficient, clean, and well-documented code in various programming languages such as Java, Python, or JavaScript.
4. Identify and fix bugs and errors in existing software or systems.
5. Work with stakeholders to understand their needs and translate them into technical specifications.
6. Design and propose system structures or architectures that will meet university
7. Identify issues within an organization's existing software systems and develop solutions.
8. Provide helpdesk support to staff, assisting them with troubleshooting software or hardware issues.
9. Install, configure, and maintain software applications and tools for employees.
10. Monitor software systems and networks to identify any performance issues, outages, or security breaches.
11. Train staff on new software and applications, ensuring that they can use them efficiently.

12. Help implement security protocols to protect systems and software from cyber threats and unauthorized access.
13. Design and manage databases to store and retrieve data effectively for various applications.
14. Build and maintain websites, web portals, and web applications using programming languages like HTML, CSS, JavaScript, and PHP.
15. Develop and execute test cases to verify the functionality and quality of soft

# 2. ICT Officer Grade II (Software Development) – 1 Position

**Educational Qualifications:**

Bachelor's degree in Computer Science, Information Technology, Software Engineering, or other related computer studies from a recognised higher learning institution.

**2.2    Working Experience:**

At least **two (02) years** of experience in software development or systems administration in an academic or enterprise environment, specifically:

**(a) Experience with Higher Education Systems:**

1. Familiarity with common university systems such as Student Information Systems (SIS), Learning Management Systems (LMS) (e.g., Canvas, Blackboard, Moodle), and Enterprise Resource Planning (ERP) software.
2. Knowledge of academic scheduling systems, grading systems, and campus management solutions.

**(b) Data Science or Analytics:**

1. Experience with data analytics, building dashboards, or working with business intelligence tools (e.g., Power BI, Tableau).
2. Knowledge of data science techniques (e.g., Python with Pandas, NumPy) to support research and reporting needs in an academic environment.

**(c) Integration with Administrative or Academic Research Tools:**

1. Experience integrating systems with academic research tools (e.g., institutional repositories, research management software).
2. Familiarity with APIs and webhooks used by research databases, such as ORCID, Google Scholar, and PubMed.

**2.3    Knowledge, Technical Skills and Abilities:**

### 2.3.1 Technical Skills:

1. Proficiency in at least one programming language such as Python, Java, C#, PHP, or Ruby.
2. Experience with relational (SQL Server, MySQL) and non-relational databases (NoSQL).

- Experience with front-end technologies (HTML, CSS, JavaScript) and back-end frameworks (Node.js, Django, ASP.NET).

1. Proficiency in Linux, Windows, and macOS environments.
2. Graphics and multimedia.

### 2.3.2 Soft Skills and Abilities:

1. Strong problem-solving abilities and attention to detail.
2. Excellent communication skills to collaborate with both technical and non-technical staff.

- Ability to prioritize tasks and manage time effectively.

1. Demonstrated ability to work in a team-oriented environment.

### 2.4 Duties and Responsibilities:

### (a) Software Development Assistance:

1. Assisting in software development tasks, troubleshooting issues, and supporting the ICT infrastructure, focusing on learning and contributing to the development of software applications and systems.
2. Writing and debugging code under the guidance of the Senior Officer (Software Development).

- Participating in code reviews and quality assurance activities.

1. Troubleshooting software issues and providing solutions.
2. Assisting in the development and maintenance of software applications.

### (b) ICT Support:

1. Providing technical support to users regarding software and hardware issues.
2. Installing and configuring software and hardware.

- Maintaining and updating IT systems and infrastructure.

1. Assisting in the management of IT assets and inventory.

**(c) Documentation and Reporting:**

1. Documenting IT processes, procedures, and troubleshooting guides.
2. Writing reports on software development activities and IT issues.

# 3. ICT Officer Grade II (Hardware Maintenance) – 1 Position

**Educational Qualifications:**

Bachelor's degree in Information Technology, Computer Engineering, Electronics, or other related computer studies from a recognised higher learning institution.

**3.2    Working Experience:**

At least **two (02) years** of experience in hardware maintenance in an academic or enterprise environment.

**3.3    Knowledge, Technical Skills and Abilities:**

**3.3.1  Technical Skills:**

**(a) Hardware Troubleshooting & Support:**

1. Strong understanding of and ability to support various office and classroom's hardware devices such as printers, copiers, projectors, interactive whiteboards, smart TVs, and AV systems used across campus.
2. Proven ability to diagnose and resolve issues related to hardware functionality, ensuring minimal disruption to university activities. This includes issues such as paper jams in printers, connectivity problems with projectors or smart TVs, and malfunctioning interactive displays.

**(b) Printer and Copier Maintenance and Support:**

1. Hands-on experience supporting different types of printers and copiers (e.g., network printers, multifunction printers, laser and inkjet printers).
2. Capability to troubleshoot, perform routine maintenance (e.g., replacing toner, fixing paper jams), and ensure devices are networked correctly for optimal usage by faculty, staff, and students.

**(c) Projector and Audio-Visual Equipment Support:**

1. Experience in setting up, configuring, and maintaining projectors, AV equipment, and audio systems used in classrooms, lecture halls, and conference rooms.
2. Ability to troubleshoot common issues such as lamp failure, connectivity problems, and display issues during lectures or events.

### (d) TVs and Interactive Whiteboards Support:

1. Support for smart TVs and interactive whiteboards, ensuring they are integrated and functioning properly for teaching and learning.
2. Troubleshooting issues related to connectivity, display resolution, and device configurations for optimal use in educational settings.

### (e) Preventive Maintenance:

1. Perform routine preventive maintenance on devices (e.g., cleaning, software updates, calibration) to extend their lifespan and reduce the frequency of breakdowns.
2. Ensure all devices are properly maintained to prevent unexpected failures, allowing teaching, learning, and research activities to continue uninterrupted.

### (f) Technical Documentation & Reporting:

1. Maintain accurate records of hardware repairs, part replacements, and preventive maintenance schedules.
2. Provide reports on hardware usage and any technical issues that may affect university operations.

### 3.3.2 Soft Skills and Abilities:

### (a) Problem-Solving & Critical Thinking:

1. Ability to quickly assess and resolve hardware issues to ensure minimal disruption in university activities such as lectures, research, and student work.

### (b) Attention to Detail:

1. Ensure all hardware devices are functioning optimally and that all maintenance tasks are completed correctly.

### (c) Effective Communication:

1. Ability to communicate clearly with faculty, staff, and students to understand their hardware issues and provide solutions in a timely manner.

**(d) Customer Service Orientation:**

1. Strong interpersonal skills to assist end-users with hardware issues and deliver a positive experience across the university.

**(e) Team Collaboration:**

1. Ability to work effectively within a team, collaborating with other departments such as IT support, facilities, and administration to provide seamless hardware support.

### 3.3.3 Additional Skills:

**(a) Multitasking & Time Management:**

1. Ability to manage multiple hardware-related requests and maintenance tasks simultaneously, ensuring timely resolution.

**(b) Inventory Management:**

1. Ability to track hardware devices, ensure adequate stock of consumables (e.g., toner, lamps), and manage equipment procurement for the university.

**(c) Basic IT Support:**

1. Understanding of basic IT support procedures to troubleshoot minor network issues or connect hardware to the University's infrastructure.

### 3.4 Duties and Responsibilities:

**(a) Routine Maintenance & Support:**

1. Perform regular cleaning, diagnostics, and preventive maintenance on hardware devices such as computers, printers, servers, monitors, photocopiers, projectors, and TVs to ensure their smooth operation in academic and research settings.

**(b) Troubleshooting and Repairs:**

1. Quickly diagnose and resolve hardware issues, minimizing downtime for students and faculty. This includes resolving issues like paper jams, ink issues, projector malfunction, and TV connectivity problems.

**(c) Installation and Configuration:**

1. Install new hardware devices and configure them for use in classrooms, labs, and research areas. This includes setting up projectors, printers, copiers, and interactive boards.

**(d) Technical Support:**

1. Provide on-demand technical support to faculty, staff, and students experiencing hardware-related problems, ensuring minimal disruption to academic activities.

**(e) Train end users:**

1. Provide training to end users on new device and new hardware installed

**(f) Hardware Inventory Management:**

1. Track and manage hardware assets across the campus, ensuring that all devices are operational and properly maintained. Handle hardware procurement and stock management.

**(g) Documentation:**

1. Maintain clear records of repairs, maintenance schedules, and inventory for all hardware used in teaching, learning, and research environments.

# 4. ICT Officer Grade II (Network Administration) – 1 Position

**Educational Qualifications:**

Bachelor of Science degree in Computer Science, Information and Communication Technology, Network Administration, or related computer studies from a recognised higher learning institution

**4.2    Working Experience:**

At least **two (02) years** of experience in network administration in an academic or enterprise environment, specifically:

1. Configuring, managing, and troubleshooting networking devices and services.
2. Experience with local area network and wide area network administration

- Familiarity with network automation tools such as Ansible, Python scripting, or Chef for automating network configuration and management tasks.

**4.3    Knowledge, Technical Skills, and Abilities:**

**4.3.1  Technical Skills:**

**(a) Networking Protocols & Standards:**

1. Proficiency in key networking protocols such as TCP/IP, DNS, DHCP, HTTP, FTP, SMTP, and SNMP.
2. In-depth understanding of the OSI Model and IP Addressing (IPv4/IPv6).

**(b) Network Infrastructure design, deployment, and Management:**

1. Hands-on experience with networking devices such as routers, switches, firewalls, and load balancers.
2. Expertise in configuring, maintaining, and troubleshooting LANs (Local Area Networks), WANs (Wide Area Networks), VLANs (Virtual LANs), and VPNs (Virtual Private Networks).

- Knowledge of network cabling, including fiber optics, Ethernet, and Wi-Fi.

**(c) Network Security:**

1. Strong understanding of network security best practices, including the use of firewalls, IDS/IPS (Intrusion Detection/Prevention Systems), and VPNs for secure remote access.
2. Experience with network segmentation, access control lists (ACLs), and NAT (Network Address Translation).

- Familiarity with security protocols such as SSL/TLS, IPsec, and SSH.

**(d) Routing and Switching:**

1. Expertise in configuring and managing dynamic routing protocols such as OSPF (Open Shortest Path First), EIGRP (Enhanced Interior Gateway Routing Protocol), and BGP (Border Gateway Protocol).
2. Hands-on experience with Layer 2/3 switches, VLAN configuration, inter-VLAN routing, and Spanning Tree Protocol (STP).

**(e) Wireless Networking:**

802.       Proficiency in setting up and managing Wi-Fi networks, including Wi-Fi standards (802.11a/b/g/n/ac/ax), SSID, and wireless security (WPA2, WPA3).

**(f) Network Monitoring and Troubleshooting:**

1. Proficiency in using network monitoring tools (e.g., Wireshark, SolarWinds, Nagios, PRTG, Meraki).

- Experience in troubleshooting network issues using diagnostic tools.

### 4.3.2 Soft Skills and Abilities:

1. Strong understanding of computer network infrastructure.
2. Knowledge of application, transport and network infrastructure protocols
3. Ability to implement, administer, and troubleshoot network infrastructure devices.
4. Ability to create network diagrams and documentation for design and planning network communication systems.
5. Ability to quickly troubleshoot and resolve complex network issues in a timely manner.
6. Precision in configuring and maintaining network settings to ensure optimal performance.
7. Ability to effectively communicate technical concepts to non-technical staff and stakeholders.
8. Ability to collaborate with other IT teams, including security and server administrators, to resolve issues and improve network performance.
9. Familiarity with SD-WAN (Software-Defined Wide Area Networks) technology for network optimization, particularly for distributed offices and remote work scenarios.
10. Hands-on experience with managing networks in a data center environment, including fiber optic cabling and high-availability configurations.
11. Ability to design scalable, reliable, and secure network architectures for organizations.

### 4.4 Duties and Responsibilities:

1. Develop and implement network systems based on the KCMC University's needs, ensuring scalability, reliability, and security.
2. Set up and configure networking devices like routers, switches, firewalls, and wireless access points.
3. Ensure that routers, switches, firewalls, and other network devices are properly configured to allow for optimal performance and security.
4. Regularly update and maintain network equipment and software, including operating system patches and firmware updates.
5. Use monitoring tools to track network performance, detect bottlenecks, and ensure uptime and efficiency.
6. Diagnose and resolve network-related problems like slow connections, dropped packets, or connectivity failures.
7. Quickly respond to and resolve network outages or service disruptions.

8. Identify the underlying causes of recurring network issues to prevent future disruptions.
9. Configure firewalls, VPNs, and other security systems to protect the network from unauthorized access and cyberattacks.
10. Regularly check for vulnerabilities or security breaches within the network and take necessary action to mitigate risks.
11. Ensure that sensitive data transmitted across the network is encrypted and protected against leaks or unauthorized access.
12. Ensure the network complies with university standards, legal requirements, and internal policies, and document this compliance.
13. Offer network-related support to employees, students and other clients, helping with connection issues, access problems, or network configuration questions.

**Remuneration for the Positions**

Competitive and attractive package of salary and fringe benefits will be offered to the successful candidates commensurate with their qualifications and work experience, and in accordance with the KCMC University Schemes of Service, and Staff Regulations and Conditions of Service.

**Mode of Application**

Applications enclosing detailed CV's, certified copies of all relevant academic certificates and transcripts, including form IV and VI certificates, names and addresses of three referees should be sent to the undersigned on or before **Monday 5ᵗʰ May  2025.**

**Your application should be through the link which is available on the website: www.kcmuco.ac.tz .**

*NB:    Only short-listed candidates will be notified and called for an Interview.*

# APPLY HERE