RHODES UNIVERSITY
Where leaders learn

JOB TITLE	Senior ICT Specialist	**GRADE**	13
POSITION CODE	50001151 (post on staff establishment of Dept of Information Systems)	**OFO CODE**	
DIVISION	Computer Science and Information Systems	**INCUMBENT**	
SUPERVISOR/MANAGER	Manager: ICT	**JOB TYPE (ACADEMIC/SUPPORT)**	Support
PERMANENT OR CONTRACT (IF CONTRACT – LENGTH OF CONTRACT)	Permanent	**FULL-TIME OR PART-TIME (IF PART-TIME HOW MANY HOURS PER DAY)**	Full-time
COUNCIL FUNDED POST OR OUTSIDE FUNDED	Council	**DATE APPROVED**	6 June 2023 updated 29 November 2023 (HS)

MAIN JOB OBJECTIVE/S
Technical Support and Systems Administration of IS and CS departments to assist the smooth running of the departments from a teaching, research and community engagement perspective.

DESCRIPTION OF KEY RESPONSIBILITY AREAS	***KEY PERFORMANCE INDICATORS***
PROJECTS - 20%	• Investigate and implement new systems solutions. • Custom solutions, including integration of bespoke systems and third-party software and hardware. • Monitoring and Alerting system for technical infrastructure. • Develop required software. • Maintain existing purpose written software. • Assistance with IS Honours project. • Evaluating and testing sample PCs submitted for the Annual Purchase on the basis of performance, reliability, suitability and compatibility with existing systems.

STAFF AND POSTGRADUATE WORKSTATION ENVIRONMENT – 20%	• Develop the ICT environment, systems and images for staff and postgraduate student computers after eliciting information from staff. • Deploy images to staff and postgraduate machines using specialized software tools. • Deploy access to the environment to staff and postgraduate student BYOD devices (personal and RU-supplied) ensuring compatible integration. •
DEPARTMENTS ADVANCED USER SUPPORT - 15%	• Provide first line support for the resolution of problems requiring advanced technical knowledge. • Systems diagnostics using specialized software tools. • Resolve 1st level problems for installed systems, including hardware, software and networks. • User support of 2 academic departments, both reactive support with immediate response and those requiring detailed investigation.
ADMINISTER PROCURED SOFTWARE - 10%	• Investigate emerging software. • Install, configure, and maintain installed systems. • Examples are: Identity and Access Management (IAM), Active Directory, Microsoft Windows Server, , Linux, Debian, MySQL, MSSQL, PostgreSQL, Oracle Apache, IIS, Clamav, F-Secure, , ASP, C#, Python, PHP, Batch, Shell.
COMPUTER LABORATORY ENVIRONMENT – 15%	• Develop the ICT environment, systems and images for computer laboratories after eliciting information from staff. • Deploy images to undergraduate and postgraduate laboratory machines using specialized software tools. • Deploy access to the environment to student BYOD devices (personal and RU-supplied) ensuring compatible integration. • Maintain the machines in the undergraduate computer laboratories. • Ensure the environment of the computer laboratories is fully functional, including furniture and fittings. • Co-ordinate the laboratory assistants, reporting on their tasks and performance.

HARDWARE SUPPORT - 5%	• Investigate and compile hardware specifications. • Assemble and maintain specialized computer hardware. • Investigate emerging hardware and platforms. • Perform systems diagnostics using specialized software tools. • Effect repairs, configuration, and integration using specialized software tools. • Maximising ROI of hardware. • Monitoring a variety of metrics from server, network, and power distribution systems and equipment • Storage Area Network hardware devices and management interfaces.
PLANNING - 5%	• Assist with long term technical planning of software, hardware and networking. • Assist with budgeting and technical planning. • Plan systems maintenance. • Assist with growth and update strategies.
RESEARCH, ADVICE AND IMPLEMENTATION - 5%	• Maintain knowledge of the changing IT field. • Advise and implement as required for the departmental research. • Communicate verbally and in writing, new ideas, and take part in high level research discussion. • Advise and understand emerging hardware platforms and trends. • Advise and support special interest groups. • Co-supervise student research. • High Level discussion with researchers – new directions. • Emerging trends in hardware and software • "Green" and low power systems, embedded systems, thin solutions, virtualisation, and Robotics. • Communicate new ideas and take part in discussions with highly technical academic staff on a theoretical and practical level, often to introduce new ideas. • Discuss and interact with other university departments to share knowledge and provide advice.

	• Discussions with Researchers – investigating new trends or influencing them to follow new trends or an established resource.
MANAGEMENT AND ADMINISTRATIVE RESPONSIBILITIES - 5%	• Assist in compiling the technical running budget. • Co-ordinate the work of occasional student assistants for specific projects, where required. • Be aware of department policies to ensure technical issues comply. • Provide advanced technical input into the PC Technical Sub Committee for the Rhodes University Annual PC Purchase. • Realm directory management and policy implementation. • Specification analysis and recommendation, followed by hardware testing, assessment, and verification of required specification.

JOB REQUIREMENTS

EDUCATION AND EXPERIENCE

A relevant 3-year qualification (NQF level 7), preferably in Computer Science or Information Systems, plus approximately 4 years' relevant experience where such experience includes: -

- Previous experience in an IT-related field
- Knowledge and/or experience in system and server design and architecture
- Previous experience working with alternative operating systems
- Algorithmic, scripting and programming skills are required

COMPETENCIES, I.E. KNOWLEDGE, SKILLS AND ATTRIBUTES

The job incumbent is required to demonstrate the following competencies: -

PROFESSIONAL COMPETENCIES OR TECHNICAL SKILLS

TECHNICAL SKILLS

- A broad knowledge of the IT field
- Knowledge of system and server design, and architecture
- Knowledge of Nortel and Dell network systems would be an advantage
- A broad knowledge of alternative operating systems, particularly Linux and BSD would be an advantage
- Good algorithmic, scripting and programming skills
- Good analytical ability, particularly the ability to solve problems
- Good organisational skills including the ability to plan, prioritise and meet deadlines

PEOPLE AND COMMUNICATION SKILLS

- Sound interpersonal skills
- Good ability to liaise with staff and elicit required information with particular reference to laboratory software
- The ability to communicate effectively, verbally and in the written form, in English
- The ability to communicate in other official languages will be an advantage

WORK BEHAVIOURS

- Strong service ethic with a track record of continuous improvement
- Able to work independently as well as a member of a team
- Actively seeks feedback
- Able to withstand criticism and use constructive criticism to improve service delivery and own contribution
- Professional and able to produce work of a high quality
- Shows initiative

SUBORDINATES

5 Student Assistants.

FUNCTIONAL RESPONSIBILITIES

PLANNING

(i) What is the longest (macro) period that the jobholder has to plan ahead?
Annual

(ii) Typically, how long are the micro phases/time periods that the macro planning is divided into?
1 to 2 Months

ADDITIONAL INFORMATION

FOR HR USE ONLY - TO BE COMPLETED BY HR

RemChannel Code	214

Note: Any changes made to the job profile (other than the name of the incumbent, the position code and OFO code) must be approved by the HR Director or the Senior Manager: Specialist HR Services.