



Royal University of Bhutan

ସମ୍ତେ ଶ୍ରୀ ରହ୍ମାନ ଶାସ୍ତ୍ର ବିଦ୍ୟାଳୟ

SAMTSE COLLEGE OF EDUCATION



Annexure 5A/6.1.2.1

**ROYAL UNIVERSITY OF BHUTAN  
POSITION PROFILE**

**1. JOB IDENTIFICATION**

<b>1.1 Position Title</b>	<b>:</b>	<b>Sr. ICT/ICT/Assistant ICT Officer</b>
<b>1.2 Position Level</b>	<b>:</b>	<b>6/7/8</b>
<b>1.3 Occupational Group</b>	<b>:</b>	<b>Administrative &amp; Technical</b>
<b>1.4 College/OVC</b>	<b>:</b>	<b>Samtse College of Education</b>

**2. MAIN PURPOSE OF THE POSITION:**

- 2.1 Provide efficient and effective support on a day to day basis to users of the network systems.
- 2.2 Resolve software and hardware support personally.
- 2.3 Support the network infrastructure to ensure that it provides a secure, stable environment for educational applications.

**3. GENERAL ROLES AND RESPONSIBILITIES:**

1. Plan, design, develop and launch effective information systems and operation systems in support of core organizational functions;
2. Analyze program requirements for a specified task and develop the methods to provide the appropriate solutions;
3. Consult with division representatives on objectives, requirements and effectiveness of proposed and existing computer systems.
4. Secure system by developing system access, monitoring control, evaluation and establish and test disaster recovery policies and procedures; complete back-ups;
5. Analyze and resolve end user software program connectivity issues in a timely and accurate fashion and provide end user training where required;
6. Upgrade system by developing, testing, evaluating, and installing enhancements and new software;
7. Designing and maintaining physical network architecture and infrastructure;
8. Ensure the stable operation of the in-house computer network. This includes planning, developing, installing, configuring, maintaining, supporting and optimizing all network hardware, software and communication links;
9. Developing and implementing network system and user security requirements;
10. Analysing network workload, monitoring performance and diagnosing problems;
11. Evaluating the productivity implications of upgraded servers and analyse the computer and information needs of the organization;
12. Create models for new database development and/or changes to existing ones;



: 05 365391 (President) 365274 (Adm) 365273 (Office) 365363 (Fax) P.O Box No. 329  
Visit us at [www.sce.edu.bt](http://www.sce.edu.bt)



Royal University of Bhutan

# ସମ୍ବୂଧନ ଶାସ୍ତ୍ରୀୟ ବିଦ୍ୟାଲୟା

## SAMTSE COLLEGE OF EDUCATION



14. Monitor database system details within the database, including stored procedures and execution time, and implement efficiency improvements;
15. Designing and implementing redundant systems, policies, and procedures for disaster recovery and data archiving to ensure effective protection and integrity of data assets;
16. Develop, implement, and maintain change control and testing processes for modifications to databases;
17. Conduct research and make recommendations on database products, services, protocols, and standards in support of procurement and development efforts;
18. Planning, designing, developing and launching Learning Management Systems (**LMS**);
19. Analyze output products and debug source code to isolate and correct errors in program logic, syntax, and data entry, and data entry, and to ensure accuracy and efficiency.
20. Conduct code reviews and unit-level testing. Develop and maintain unit-level test plans;
21. Modify existing programs to correct program errors or modify existing functionality or interface;
22. Implement security techniques designed to preclude unauthorized access to computer data and to reduce computing resource misuse;
23. Design, develop, maintain, and execute test plans for formal qualification testing, system integration testing, regression testing and verification, validation and acceptance testing;
24. Build the operations end of the organization's website and keep them functioning smoothly;
25. Design, build and implement new web pages and sites;
26. Apply fundamental concepts, practices, procedures and existing policies and guidelines in specialised areas of information technology;
27. Implement activities related to development of infrastructure and facilities for ICT based networking;
28. Ensure LAN and Internet connectivity always;
29. Ensure that the security of the data and systems are not compromised;
30. Manage and maintain all network components of an agency, since network needs 24/7 uptime;
31. Maintain detailed documentation of all work performed, sufficient to allow independent generation of the same process and the results.
32. Assist in setting and coordinating priorities for allocation of budget for ICT based on the requirements of the organisation;
33. Assist in identifying and arranging appropriate skills for ICT personnel in the organisation;
34. Assist in establishing long and short-term goals and sets priorities in the area of information technology;
35. Participate in negotiations for software purchases with vendors; oversees the maintenance of licenses resulting from such purchases;
36. Maintain detailed documentation of all work performed, sufficient to allow independent generation of the same process and the results;
37. Assist in the writing of research papers, briefs and reports, discussion materials; and
38. Carry out any other task that may be assigned from time to time.





Royal University of Bhutan

ସମ୍ବୂଧନ କ୍ଷେତ୍ର ଶାସ୍ତ୍ର ବିଦ୍ୟାଳୟ

SAMTSE COLLEGE OF EDUCATION



#### 4. SPECIFIC ROLES AND RESPONSIBILITIES:

- 4.1 Practical knowledge of computer operations and experience in supporting Microsoft operating systems and office applications, telecommunications equipment and another ICT hardware.
- 4.2 Knowledge, experience and understanding of a networking including wireless configuration.
- 4.3 Knowledge of server configuration using Linux.
- 4.4 Install and configure servers
- 4.5 Operation and management of servers
- 4.6 Operation and management of ICT services
- 4.7 Operation and management of cloud server technology (Proxmox)
- 4.8 Install, configure and manage KOHA library system
- 4.9 Install, configure and manage Moodle VLE system
- 4.10 Install, configure and manage DNS server
- 4.11 Install, configure and manage web server (Word Press)
- 4.12 Install, configure and manage file server
- 4.13 Install, configure and manage database server
- 4.14 Install, configure and manage PF sense security system
- 4.15 Install, configure and manage UniFi Pro WiFi system
- 4.16 Design and implement network for both LAN and WLAN
- 4.17 Revise and document IT policies and procedures for the college
- 4.18 Provide on-the-job training and guidance for the ICT staff
- 4.19 Plan and roadmap day-to-day operations for ICT staff

##### 4.1 Other Responsibility

- ◆ Undertake other responsibilities as deemed appropriate by ICT Section and the College management.

#### 5. KNOWLEDGE, SKILLS & ABILITIES (KSA) REQUIREMENTS:

- 5.1. **Education:** MTech IT/CS, MEng IT/CS, MSc IT/CS, BEng IT/CS, BSc IT/CS, BTech



: 05 365391 (President) 365274 (Adm) 365273 (Office) 365363 (Fax) P.O Box No. 329  
Visit us at [www.sce.edu.bt](http://www.sce.edu.bt)



Royal University of Bhutan

ସମ୍ବୂଧନ କ୍ଷେତ୍ର ଶାସ୍ତ୍ର ବିଦ୍ୟାଳୟ

SAMTSE COLLEGE OF EDUCATION



**5.2. Experience:** Experienced in networking and System Administration

**5.3. Knowledge Skills and Abilities:**

- 5.3.1 Ability to lead and advise the College Management on the long-term visioning and planning of ICT infrastructure and ICT services development in the College to facilitate in achieving the vision of developing a technology-enabled and technology-enhanced teacher education and other courses the College offers as a higher education institution;
- 5.3.2 Conversant in the area of responsibilities both in terms of technical knowledge and changing environment.
- 5.3.3 Good communication skills both in terms of written and spoken.
- 5.3.3 Sound analytical skills with knowledge in planning, management and execution of projects and activities.
- 5.3.4 Ability to keep up-to-date information in the area of responsibilities and provide timely information for informed decision making.
- 5.3.5 Ability to work in teams and ready to work beyond working hours.
- 5.3.6 Capable of coping with pressures of the job and meeting deadlines and competing demands.
- 5.3.7 Ability to understand, troubleshoot and resolve software issues.



: 05 365391 (President) 365274 (Adm) 365273 (Office) 365363 (Fax) P.O Box No. 329  
Visit us at [www.sce.edu.bt](http://www.sce.edu.bt)