



**Lumbini
Buddhist
University**

University Digitalization Policy 2023



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Abbreviations

HRD:	Human Resource Development
ICT:	Information Communication Technology
ISP:	Internet Service Provider
IT:	Information Technology
LMS:	Learning Management System
MIS:	Management Information System
MoEST:	Ministry of Education, Science and Technology
MOOC:	Massive Open Online Course
NOC:	No Objection Certificate
OER:	Open Educational Resources
CMS:	Content Management System
EIMS:	Electronic Information Management System
UMIS:	University Management Information System
ERPS:	Enterprise Resource Planning System
LBU:	Lumbini Buddhist University
UGC:	University Grants Commission
HEI:	Higher Education Institution



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1. Background

Lumbini Buddhist University (LBU) is an autonomous and public institution of higher learning committed to educating the people of Nepal and enriching the global learning community through the application of core Buddhist values and to promote World Peace. LBU uses information technology (IT) to support its mission and goals. IT is used to provide students with access to educational resources, to support research and teaching, and to manage the university's operations.

The Digitalization Policy of LBU is designed to ensure that IT is used in a responsible and ethical manner. The policy covers the use of IT by students, staff, and faculty. The Digitalization Policy is intended to protect the university's information assets, to ensure the privacy of its users, and to promote the safe and effective use of IT.

The Digitalization Policy is based on the following principles:

- IT should be used in a responsible and ethical manner.
- IT should be used to support the university's mission and goals.
- IT should be used to protect the university's information assets.
- IT should be used to ensure the privacy of its users.
- IT should be used to promote the safe and effective use of IT.

The Digitalization Policy is intended to cover all aspects of the use of IT at LBU, including:

- The use of IT devices and applications
- The use of IT resources
- The use of IT for research and teaching
- The use of IT for administrative purposes
- The use of IT for communication and collaboration
- The use of IT for security and privacy

The Digitalization Policy is intended to be a living document that will be reviewed and updated on a regular basis. The policy is intended to be flexible enough to accommodate changes in technology and changes in the university's needs.



19 pandemic became the turning and transforming phase for the University's IT development and advancement. Meanwhile, it developed a policy guideline titled "अनलाइन तथा दूर शिक्षा सम्बन्धी विनियम २०७७"[1]. The 13th University Senate passed the agenda to establish the Centralized University Management system to help the University to reach the academic and administrative objectives of Information Technology. University Stake Holders has a clear vision of applying the means and resources to different sector incorporating the government's Digital Nepal Framework- 2019.

This program helps the university to be familiar with the current trends in digitalization and the probable radical changes. This program supports the identification of the multiple pedagogical channels, the intrinsic motivation to use the channels, and the objective evaluation system along with good governance. This program upgrades the knowledge related to digitalization and automation program to provide an opportunity to participate, interact and explore a range of practical issues related to teaching, accounting, and administrative performance. University professors, employees, and students have to be familiar with the techniques and structure of academic development in Nepal through a paradigm shift through digital transformation. It promotes professors' and employees' knowledge and skills through transparent performance. Technology-based and web-based learning administrative activities support the transformation. The technology-based Continuous evaluation through digital techniques and Curriculum reformation process should move hand in hand with digital transformation.

4. Scope

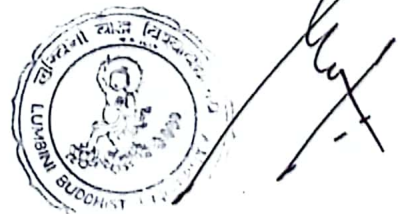
The ICT Steering Committee call upon IT experts for specialized tasks, ensuring that LBU benefits from the most up-to-date knowledge and expertise in the IT domain. This approach enables the university to respond promptly to changes in the technology landscape and effectively address emerging threats to IT security and data privacy. The scope of this policy is defined and will be implemented and practiced to these groups.

1. **Applicable Areas:** The applicable area of this policy is overall education system and administrative system including financial and examination of system of Lumbini Buddhist University.
2. **Sectors:** Academic Administration, Financial Administration, Library, Examination System,
3. **Stakeholders:** Direct stakeholders of this policy are all the administrative and university's units. Prospective students, scholars and researcher, officials are also the major scope of this policy.

5. Vision, Mission, Objectives/goal

LBU's IT vision is to provide a safe, secure, and reliable IT environment that supports the teaching, learning, research, and administrative activities of the university.

1. <https://lbu.edu.np/laws-and-acts/#1645959464878-2ee5874e-9191>



Specific Objectives:

- To provide students with access to the information and resources they need to succeed in their studies.
- To support faculty in their research and teaching activities.
- To provide staff with the tools they need to be productive and efficient.
- To manage the university's information assets effectively.
- To protect the privacy of the university's users.
- To promote the safe and effective use of IT.

General Objective

- The use of IT for teaching and learning.
- The use of IT for research.
- The use of IT for administrative purposes.
- The use of IT for security and privacy.

6. Key Digitalization Policy Statements

6.1 Connectivity

This policy aims to establish a robust network infrastructure that ensures seamless access to digital resources while safeguarding sensitive information.

- Secure Internet and Wi-Fi Access:** The university will implement strong internet connection with security measures, including encryption and password protection, to prevent unauthorized access to the LAN and Wi-Fi network.
- Intranet Security:** The intranet system will be protected by advanced security protocols to maintain the confidentiality and integrity of internal communications and data through VPN or any means of secure connections in sensitive resources sharing.

6.2 Digital Infrastructure Development

This policy aims to establish an efficient IT support unit that will cater to the diverse technological needs of the university community.

- The establishment of a dedicated Data Center to offer secure and centralized data storage and processing capabilities, safeguarding valuable institutional information, and facilitating data-driven decision-making.
- Collaboration with the Government Integrated Data Center (GIDC).
- Integrated and Centralized Management System throughout the university to manage the data through one way system.
- Practice and address of the existing IT system and foundation of LBU to scale and integrate new opportunities.



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- v. The utilization of cloud infrastructure to enhance data accessibility, scalability, and disaster recovery capabilities, ensuring data remains available and secure in any eventuality.
- vi. Software development will be centralized system as far as possible. Colleges and sub-offices are discouraged from procuring separate software.
- vii. Initiate innovative software design as per the standard coding convention of the University to enhance the quality and discourage the disparities of software components.

6.3 Learning Management System/Virtual Learning Environment/Digital Learning Platform:

This policy aims to adopt and integrate an advanced digital platform to adopt the new way of learning experience for students and faculty members.

- i. Implementation of a user-friendly and feature-rich digital platform that serves as a centralized hub for all academic activities.
- ii. The Learning Management System (LMS) facilitates course delivery, content management, and assessment processes, providing an interactive and engaging learning environment for students.
- iii. The VLE facilitates access to academic resources, research materials, and multimedia content, enhancing the depth and scope of learning opportunities.
- iv. Emphasizes the importance of faculty training to effectively utilize the digital platform's features, ensuring a seamless and impactful transition to digital learning.

6.4 Strengthening web based EMIS:

Lumbini Buddhist University is committed to strengthening the web-based Education Management Information System (EMIS) to enhance data management and reporting capabilities.

- i. The web based EMIS serves as a comprehensive data repository, ensuring accuracy, timeliness, and integrity of educational data while complying with data privacy and security regulations.
- ii. EMIS of Lumbini Buddhist University will be operated through one-way channel I.e., centralized system.
- iii. Optimize institutional processes, enhance data-driven decision-making, and improve overall efficiency in academic and administrative operations.
- iv. The policy underscores the university's commitment to leveraging technology for better educational management.

6.5 Digital Resource Development and Dissemination

Lumbini Buddhist University is committed to developing and disseminating digital resources to enrich the learning experiences of students and faculty.



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- i. Create an extensive digital resource ecosystem, including an E-Library, Digital Studio, and the production and publication of e-books, audio/video content, animation, simulations, and gaming learning materials.
- ii. The university will create a state-of-the-art Digital Studio to produce high-quality educational content, including audio/video lectures, online Buddhist courses, simulations, and other interactive learning materials.
- iii. The dissemination of digital resources will be a priority, encouraging the sharing of academic content among students, faculty, and researchers.

6.6 Human Resource Development:

- i. Lumbini Buddhist University recognizes the paramount importance of Human Resource Development through ICT to foster a technologically competent academic community.
- ii. Increase the efficiency of Human Resources.
- iii. This policy emphasizes the continuous development of faculty and staff's ICT skills to effectively leverage digital tools and technologies.
- iv. Comprehensive training programs and professional development opportunities tailored to address the specific ICT needs of faculty and staff.
- v. Empowering faculty and staff with the necessary ICT skills.

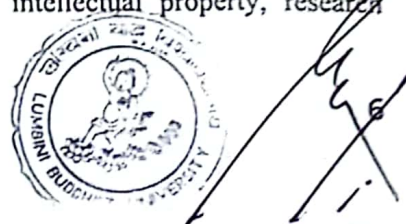
6.7 University and its Campus Office Automation (HEIs E-governance, ERP system integrating finance, Administration (HR/PIS), and EMIS):

Lumbini Buddhist University is dedicated to implementing efficient and seamless university and campus office automation through the adoption of Higher Education Institutions (HEIs) E-governance, specifically integrating Enterprise Resource Planning (ERP) systems for finance, Administration (HR/PIS), and Education Management Information System (EMIS).

- i. Streamline administrative processes and promote transparency and accuracy in fiscal management, human resources, and student information.
- ii. Create an interconnected administrative ecosystem, enabling timely and error-free processing of financial transactions, payroll management, employee records, and student data. This integration will also enable a smoother flow of communication and collaboration between various departments and campus offices.
- iii. Develop web based ERPS integrating EMIS.
- iv. The integration of ERP systems for finance, Administration (HR/PIS), and EMIS aligns with the university's commitment to technological advancement and a culture of continuous improvement.

6.8 University Intellectual Property Security, Privacy, Plagiarism System, Surveillance, and Copyright Law:

- i. Implement stringent security protocols to safeguard intellectual property, research findings, and innovative creations.



- ii. Promote the intellectual property of Lumbini Buddhist University within and beyond.
- iii. University will have a strong plagiarism system in place to detect and deter any academic misconduct.
- iv. Educate its academic community about copyright laws and encourage responsible use of copyrighted materials.
- v. Maintain the proprietary security and coding convention of vendors, software developers, direct and indirect resources.

6.9 University Data Protection, Backup, and Disaster Recovery:

This policy emphasizes the importance of preserving and securing institutional data to ensure continuity and data integrity.

- i. Implement mirror storage system to save and duplicate the data as a backup.
- ii. Implement the end-to-end encryption between server and end-user
- iii. Implement the interval cloud back up system to store the progress of complete system and maintain the backup.
- iv. Implement stringent data protection measures to safeguard sensitive information from unauthorized access, tampering, or loss.
- v. Access controls, encryption, and multi-factor authentication will be employed to protect data from potential security breaches.

6.10 IT System Security, Safety, Avoidance, and Prevention from Attacks:

- i. Prioritizes the security and safety of its IT systems to prevent cyber-attacks and security breaches. The policy entails a robust IT security framework with firewalls, antivirus software, and intrusion detection systems.
- ii. Regular vulnerability assessments and security audits.
- iii. Security awareness training to empower faculty, staff, and students to recognize and respond to risks.
- iv. Internal security measures, such as access controls and encryption, will be implemented to protect confidential data.

6.11 Centralized HEIs Data Management:

- i. Centralizing Higher Education Institutions (HEIs) data management to ensure consistency, accuracy, and accessibility of institutional information.
- ii. Centralized data management system that integrates data from various departments, campuses, and administrative units.



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- iii. Develop reliable repository for student records, academic information, research data, financial transactions, and administrative records.
- iv. Promote data standardization and uniformity across the institution.

6.12 Online/Open/Blended Examination:

- i. Online/Open/Blended Examination modalities to enhance assessment practices and promote flexible learning experiences.
- ii. Open Examinations to allow students to access various reference materials and resources during the exam, encouraging critical thinking and problem-solving skills.
- iii. Blended Examinations will combine traditional in-person testing with online components.
- iv. Modernize assessment practices, provide flexible evaluation options as per the semester standard, and prepare students for digital-age challenges.

6.13 Email System:

- i. Adopt a secure and efficient email system to facilitate official communication among faculty, staff, and students (@lbu.edu.np)

6.14 Website Uniformity and accessibility:

- i. All university websites, including departmental and affiliated campus sites, must adhere to the university's approved branding guidelines. This ensures a cohesive visual identity and strengthens the university's online presence. The university recognizes the value of website uniformity and accessibility in promoting transparency, communication, and engagement within the academic community and beyond.

7. Institutional Arrangement

The Institutional Arrangement for the Digitalization Policy of Lumbini Buddhist University (LBU) involves the establishment of an ICT Steering Committee as the key IT governance and regulatory team. This committee will be responsible for developing the university's Digitalization Policy, strategy, and guidelines and ensuring alignment with the overall IT strategy of the institution. Key operational arrangements:

7.1 ICT Steering Committee

- Composed of six members with expertise in information technology and relevant fields.
- Responsible for formulating and reviewing Digitalization Policies, strategies, and guidelines.
- Ensures coordination, collaboration, and effective implementation of Digitalization Policies and initiatives.
- Liaises with the Lumbini Province government and local governments on ICT standards and initiatives.



- The committee may invite IT experts/ Engineer and specialists for specific tasks or to provide recommendations on complex IT issues. These experts will contribute their knowledge and experience to ensure the effectiveness of Digitalization Policy implementation.

7.2 IT Support Unit:

- Responsible for providing technical support and assistance to faculty, staff, and students in utilizing IT resources and services.
- Ensures the smooth functioning of the university's IT infrastructure and services.
- Central Office, Dean office, Exam office constituent and affiliated campus will have a technical support staff/team, who is/are responsible for providing technical support to end users of university's Digitalization policies (i.e. faculty/staff and students).
- Collaborates with the ICT Steering Committee to implement Digitalization Policies and guidelines effectively.

7.3 Compliance and Monitoring Team:

- Responsible for monitoring and evaluating the adherence to Digitalization Policies and guidelines across the university.
- Conducts regular audits to assess the effectiveness of Digitalization Policy implementation.
- Reports to the ICT Steering Committee and recommends necessary adjustments or improvements.

7.4 Collaboration with External Agencies:

- Establishes partnerships with external agencies, industry experts, and other educational institutions to stay abreast of IT trends and best practices.
- Collaborates with relevant government bodies and regulatory authorities to ensure compliance with IT standards and regulations.

8. Legal and Regulatory Arrangements

There will be a university central level ICT Steering Committee consisting of the following 6 members.

Table 1: University ICT Steering Committee

SN	Committee Members	Designation
1	Registrar	Chairman
2	Planning/Research Director	Member
3	Dean (From any Faculty)	Member
4	Administrative Head	Member
5	IT Expert/ Engineer	Member
6	IT Director/Co-Ordinator	Member Secretary

This committee acts as a central regulatory body for Digitalization Policy of the university. All other HEI Digitalization Policies, strategy, guidelines, and procedures will follow this policy.

The following measures will be opted for conflict, misunderstanding, or other legal problems.



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- i. **Assessment and Documentation:** Begin by thoroughly understanding the nature of the conflict, misunderstanding, or legal problem. Document all relevant details, including the policy in question, the parties involved, the specific issues that have arisen, and any communication related to the matter.
- ii. **Review the Policy:** Carefully review the Digitalization Policy in question to determine whether it might be ambiguous, outdated, or conflicting with other policies. Consider if the policy truly serves its intended purpose and whether it aligns with best practices.
- iii. **Gather Input:** Consult with the individuals or teams affected by the policy, as well as legal experts, IT professionals, and relevant stakeholders. Collect different perspectives to comprehensively understand the situation and possible solutions.
- iv. **Modify or Update the Policy:** If the policy is found to be problematic, consider modifying or updating it. Ensure that any changes are well-defined, unambiguous, and legally compliant. Seek input from legal experts to make sure the revised policy is sound. Training and
- v. **Awareness:** If the conflict arose due to a misunderstanding or lack of awareness about the policy, provide training and awareness sessions. Ensure that all stakeholders, employees, or users understand the policy's purpose, implications, and proper implementation.
- vi. **Mediation and Resolution:** If the conflict involves different parties within the organization, consider using mediation to facilitate open discussions and find common ground. Aim for a resolution that addresses concerns while aligning with organizational goals.
- vii. **Legal Consultation:** If the conflict has legal implications, consult with legal experts to assess potential risks and liabilities. They can provide guidance on how to proceed and minimize legal exposure.
- viii. **Escalation and Reporting:** If the conflict cannot be resolved internally, consider escalating the matter to higher management or executive levels. Ensure that the situation is appropriately documented and reported.
- ix. **Monitoring and Feedback:** After implementing changes to the policy or resolving the conflict, continue to monitor the status. Gather feedback from relevant stakeholders to ensure the changes are effective and the conflict does not reoccur.
- x. **Continuous Improvement:** Use the experience as an opportunity for improvement. Regularly review and update policies to ensure they remain relevant, clear, and effective. Learn from the situation to prevent similar conflicts in the future.

9. Monitoring and Evaluation

Lumbini Buddhist University integrates Information and Communication Technology (ICT) into its monitoring and evaluation processes, fostering a data-driven approach. The Digitalization Policy incorporates key components to leverage ICT tools effectively.

- i. **Centralized Data Management:** Implementing a centralized data management system to consolidate and store data from various academic and administrative units, facilitating data analytics and visualization for insights into performance indicators and trends.



- ii. **Real-Time Data Collection:** Utilizing mobile applications and online forms for real-time data collection, enabling prompt feedback and assessments while integrating data collection with academic and administrative processes.
- iii. **Performance Dashboards:** Developing interactive dashboards to track key performance indicators in real-time, empowering stakeholders to make informed decisions based on up-to-date data.
- iv. **Automated Reporting:** Implementing automated reporting mechanisms for generating regular and ad-hoc reports, enhancing efficiency, and reducing manual efforts.
- v. **Outcome-Based Evaluation:** Incorporating outcome-based evaluation frameworks to measure the effectiveness of educational programs and initiatives, assessing their impact on learning outcomes and institutional performance.
- vi. **Feedback Mechanisms:** Establishing digital feedback mechanisms to collect input from students, faculty, staff, and stakeholders, enabling continuous improvement of institutional processes.
- vii. **Data Security and Privacy:** Ensuring robust data security measures and compliance with privacy regulations to protect sensitive information.
- viii. **Meet Up:** Regular meetings and discussion of the operational and policy level indicators to understand the impacts of overall ICT of Lumbini Buddhist University.
- ix. **Audit:** Regular audit of the entire system in a fixed interval to track the system will enhance the evaluation capacity and mechanism.

