



पूर्वाञ्चल विश्वविद्यालय

व्यवस्थापन संकाय

विराटनगर, नेपाल



प.सं.:

च.नं.: ४६६/०८२-०८३

मिति: २०८३/०३/०४

श्रीमान् निर्देशकज्यू/क्याम्पस प्रमुखज्यू/प्राचार्यज्यू,
व्यवस्थापन संकाय अन्तर्गतका स्नातक (BBA) तह संचालन गर्ने
सम्पूर्ण आगिक तथा सम्बन्धन प्राप्त स्कूल/क्याम्पस/कलेजहरु।

विषय: Subject Code IT382: Digital Governance को नाम र पाठ्यक्रम परिमार्जन सम्बन्धमा।

महोदय,

उपरोक्त सम्बन्धमा, पूर्वाञ्चल विश्वविद्यालय, व्यवस्थापन संकाय अन्तर्गत संचालित BBA शैक्षिक कार्यक्रमको आठौं सेमेष्टरको Subject Code IT382: Digital Governance विषयलाई सोही Subject Code कायम गरि उक्त विषयको नाम (Digital Governance, AI and Blockchain for Business) कायम गरीएको र पाठ्यक्रम समेत परिमार्जन गरिएकोले परिमार्जित नाम र पाठ्यक्रम अनुसार अध्ययन अध्यापन गराउनु हुन जानकारी गराइन्छ।


प्रा. डा. उत्तम कुमार रेग्मी
डीन

संलग्न: परिमार्जित पाठ्यक्रम पाना ३।



PURBANCHAL UNIVERSITY

BBA VIII Semester

Course Title	: Digital Governance, AI and Blockchain for Business
Credit Hours	: 3
Teaching Hours	: 48
Course Type	: Core
Course Code	: IT 382

1. Course Description

This course offers a broad understanding of digital governance and its role in supporting organizations to manage digital transformation, data, emerging technologies, and performance effectively. It covers key principles, frameworks, and practices for governing digital resources, aligning digital initiatives with strategic goals, ensuring accountability, and managing data privacy, compliance, and investments. The course also introduces Artificial Intelligence (AI) and Blockchain from a business and governance perspective, focusing on their applications, benefits, risks, ethics, and regulatory issues, with emphasis on Nepalese organizational and public-sector contexts through relevant case studies.

2. Course Objectives

Upon successful completion of this course, students will be able to:

- Apply digital governance principles and frameworks to align technology, data infrastructure, and organizational resources with core business objectives.
- Evaluate the ethical, legal, and strategic implications of data ownership, algorithmic decision systems, privacy-by-design, and decentralized networks within corporate and regulatory boundaries.
- Analyze digital transformation trends, systemic cyber risks, and operational barriers to successfully advocate for sustainable, inclusive, and responsible technology adoption in Nepalese business and public-sector environments.

3. Course Contents

Unit I: Foundations of Digital Transformation and Digital Governance (LH 8)

Meaning and characteristics of the digital economy; Structural shift from the traditional economy to the digital economy; Role of Information Technology (IT) in modern business and society; Meaning and scope of digital transformation ; Drivers of digital transformation; Evolution of digital business and digital disruption ; Distinguishing between digitization, digitalization, and digital transformation; Digital maturity and its stages; Organizational transformation challenges; Meaning and importance of digital governance ; Governance versus management ; Digital ecosystem: stakeholders and key actors; Strategic alignment of business



and IT ; Organizational structures for digital oversight; Introduction to governance frameworks ; Overview of COBIT and ITIL; Digital transformation initiatives in Nepal ; Global trends in digital policy ; Emerging challenges and opportunities in digital governance

Case Study: Digital governance structure of Nepal Rastra Bank or eSewa.

Unit II: Digital Strategy and Organizational Alignment

(LH 8)

Strategic planning in the digital age; aligning digital initiatives with business goals; digital business models including platform, subscription and freemium models; digital entrepreneurship and the sharing economy; roles of the Chief Information Officer (CIO), Chief Digital Officer (CDO) and other digital leadership positions; resource allocation for digital projects; digital portfolio management; vendor management and service level agreements; outsourcing versus in-house digital strategy; performance measurement and key performance indicators; measuring return on digital investment.

Case Study: Digital strategy and leadership roles at Khalti, Daraz, or Nepal Telecom.

Unit III: Data Governance, Privacy, Cybersecurity and Compliance

(LH 8)

Introduction to data governance; data privacy and protection principles; overview of global data privacy regulations and Nepalese privacy provisions; data life-cycle management from collection to disposal; ethical use of data and algorithms; transparency and accountability in digital decision-making; intellectual property considerations and digital rights management; ; cybersecurity threats including malware, ransomware, phishing and deepfake fraud; business impacts of cyberattacks; legal obligations for data breaches; compliance auditing for businesses; corporate social responsibility in digital spaces.

Case Study: Data privacy compliance under the *Individual Privacy Act, 2075* and the impact of real-world Nepalese cyber incidents.

Unit IV: Artificial Intelligence for Business Governance

(LH 8)

Concept and scope of Artificial Intelligence in business; evolution and significance of AI; Narrow AI and Generative AI; rule-based automation and learning-based systems; prompt engineering fundamentals; AI-enabled business decision-making including descriptive, predictive and prescriptive analytics; applications of AI in marketing, finance, human resource management and operations; benefits and limitations of AI adoption; ethical and managerial challenges of AI; building an AI-ready organization.

Case Study: AI-based chatbots, fraud detection and credit scoring in Nepalese banks.

Unit V: Blockchain Frameworks for Business Governance

(LH 8)

Concept and characteristics of Blockchain technology; distributed ledger versus centralized systems; public, private and hybrid Blockchain models; trust, transparency and traceability in digital transactions; digital assets and Central Bank Digital Currency; applications of



Blockchain in supply chains, banking, finance, healthcare and public services; opportunities and limitations of Blockchain adoption; regulatory perspectives on Blockchain, cryptocurrency and digital assets in Nepal and globally.

Case Study: Nepal Rastra Bank's directive on cryptocurrency bans vs. its exploration of a National CBDC and blockchain-based remittance.

Unit VI: Emerging Technologies and the Future of Digital Governance (LH 8)

Convergence of Artificial Intelligence, Blockchain and Cloud Computing; Integrated governance of Artificial Intelligence and Blockchain; platform economy and digital ecosystems; digital transformation and change management; cybersecurity governance and risk management; digital ethics and responsible innovation; corporate social responsibility and sustainable digital strategy; Green IT and responsible digital transformation; role of digital governance in crisis management; preparing for future regulatory developments; future trends in digital governance and digital business.

Case Study: Digital Nepal Framework and national digital transformation initiatives.

Suggested Readings

- Agrawal, A., Gans, J., & Goldfarb, A. (2018). *Prediction machines: The simple economics of artificial intelligence*. Harvard Business Review Press.
- Government of Nepal, Ministry of Communication and Information Technology. (n.d.). *Digital Nepal framework-2.0 (latest edition/draft)*.
- Iansiti, M., & Lakhani, K. R. (2020). *Competing in the age of AI: Strategy and leadership when algorithms and networks run the world*. Harvard Business Review Press.
- Nepal Law Commission. (2018). *Individual privacy act, 2075 (2018) (official English translation)*.
- Nepal Rastra Bank. (n.d.). *Unified directives and latest IT/AI/cyber security guidelines for banks and financial institutions*.
- Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.
- Stallings, W. (2017). *Cryptography and network security: Principles and practice* (8th ed.). Pearson.
- Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution: How the technology behind bitcoin and other cryptocurrencies is changing the world*. Portfolio.
- Weill, P., & Ross, J. W. (2004). *IT governance: How top performers manage IT decision rights for superior results*. Harvard Business Review Press.

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