

Rajarshi Janak University
Faculty of Management

Office of the Dean



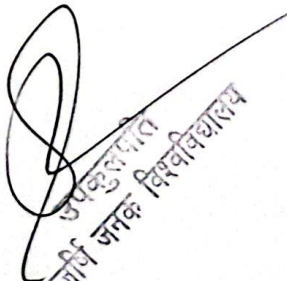
BACHELOR OF DIGITAL BUSINESS MANAGEMENT (BDBM)

Third Year - Fifth Semester

Fifth Semester Syllabus

Effective from the Academic Batch of 2024 AD

Semester-V		
Code	Subject	Credit Hours
BDBM 351	Business Environment & Strategic Management	3
BDBM 352	Operation Management	3
BDBM 353	Business Research Methods	3
BDBM 354	Understanding and Managing Data	3
BDBM 355	Business and Management Information System	3


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Rajarshi Janak University Faculty of Management

Level: Bachelor

Program: BDBM

Course: Business Environment and Strategic Management

Course Code: BDBM 351

Credit: 3

Year: Third

Semester: Fifth

Lecture Hours: 48

Internal Assessment: 40 Marks

External Evaluation: 60 Marks

Course Description

This course provides a comprehensive understanding of the business environment and its implications for strategic management. It examines the internal and external environmental forces that influence organizational performance and strategic decision-making. The course introduces systematic approaches to environmental analysis, strategic formulation, evaluation, implementation and control. Emphasis is placed on analytical frameworks, competitive strategies, organizational alignment, and strategic control mechanisms, with consideration of both national and international business contexts. By integrating theory with practical tools and contemporary strategic issues, the course prepares students to develop, implement, and evaluate strategies that enable organizations to achieve sustainable competitive advantage in a dynamic business environment.

Course Objectives

The primary objective of this course is to develop students' conceptual, analytical, and practical understanding of the business environment and strategic management process. The course aims to familiarize students with the nature and components of the business environment and equip them with tools to analyze environmental opportunities and threats as well as organizational strengths and weaknesses. It seeks to enhance students' ability to formulate strategic intent, evaluate strategic alternatives, and select appropriate competitive and corporate strategies. Further, the course emphasizes effective strategy implementation through organizational alignment, leadership, culture, and governance, along with the establishment of strategic and operational control systems. Ultimately, the course intends to develop strategic thinking and decision-making capabilities necessary for managing organizations in a complex, competitive, and globalized environment.

Learning Outcomes

By the end of this course, students will be able to:



- Explain the concept, scope, and components of the business environment and their impact on organizational performance.
- Distinguish between external, internal, micro, and macro environmental forces and analyze their implications for strategic decisions.
- Apply systematic environmental analysis techniques such as PEST, Porter's forces, value chain analysis, and SWOT to assess organizational situations.
- Describe the strategic management process, including strategy formulation, evaluation, implementation, and control.
- Formulate vision, mission, objectives, and long-term strategies using appropriate strategic frameworks.
- Develop implementation plans through operational strategies, functional strategies, policies, and organizational alignment.
- Assess the role of leadership, culture, ethics, and governance in successful strategy execution.
- Design and apply strategic and operational control systems to monitor performance and initiate corrective actions.

Course Contents

Part 1: Business Environment

Unit 1: Introduction to Business Environment

LH 8

- Concept: Meaning, nature, and significance of business environment.
- Components: Internal environment vs. External environment (Micro and Macro).
- Environmental Analysis: Process, importance and Environmental Turbulence; Understanding VUCA (Volatility, Uncertainty, Complexity, Ambiguity).
- Emerging Trends: Globalization, digital transformation (e-commerce, gig economy and automation) and changing business landscapes.

Unit 2: Macro Environmental Analysis

LH 8

- Political-Legal: Government policies, political stability, and legal frameworks regulating businesses.

- Economic: Economic systems, economic policies (fiscal and monetary), inflation, income distribution, and economic growth indicators.
- Socio-Cultural: Demographics, cultural values, lifestyle changes, and social responsibility of business.
- Technological & Ecological: Technological changes, innovation, environmental protection laws, green business, and sustainability.

Unit 3: Industrial and Competitive Analysis

LH 6

- Industry Analysis: Concept of industry, structure, and life cycle.
- Porter's Five Forces Model: Threat of new entrants, bargaining power of buyers, bargaining power of suppliers, threat of substitutes, and competitive rivalry.
- Strategic Groups & Competitor Mapping: Competitor intelligence tracking using data analytics and identifying blue ocean shifts.
- Global Integration: Foreign Direct Investment (FDI) policies, barriers, and the competitive threat/opportunities of Multinational Corporations (MNCs) in Nepal.

Part 2: Strategic Management

Unit 4: Introduction to Strategic Management

LH 6

- Concept: Meaning, characteristics, and importance of strategy and strategic management.
- Process: Strategic intent, formulation, implementation, and evaluation.
- Strategic Intent: Hierarchy of strategic intent (Vision, Mission, Goals, and Objectives).
- Strategic Resilience: Scenario planning for digital disruptions and "Black Swan" events in technology.

Unit 5: Strategy Formulation

LH 8

- Internal Analysis: Resource-Based View (RBV), VRIO framework, and Value Chain Analysis.
- Strategic Tools: SWOT analysis, TOWS matrix, BCG matrix, and GE matrix.
- Levels of Strategy: Corporate-level (Growth, Stability, Retrenchment); Business-level (Porter's Generic Strategies; Cost Leadership, Differentiation, Focus); Functional-level (Marketing, Finance, HR, Operations).

Unit 6: Strategy Implementation

LH 6

- Concept: Linkage between strategy formulation and implementation.

- Structural Agility: Transitioning from rigid hierarchies to matrix, network, and virtual organizational structures.
- Behavioral Execution: Leadership in a remote/hybrid environment, fostering a culture of innovation, and managing change resistance during digital adoption.
- Functional Implementation: Aligning policies and allocating resources across departments.

Unit 7: Strategic Evaluation and Control

LH 6

- Concept: Nature and importance of strategic control.
- Process: Setting standards, measuring performance, analyzing variances, and taking corrective actions.
- Tools: Balanced Scorecard (BSC), financial controls, and operational controls.
- Corporate Governance & Ethics: Ethical AI usage, corporate social responsibility (CSR) and risk management.

Suggested Readings:

Aswatthapa, K. *Business Environment for Strategic Management*. New Delhi: Himalayan Publishing House.

Dave Chaffey, *Digital Business and E-Commerce Management*. UK: Pearson (8th Edition).

David, F.R. *Strategic Management: Concepts and Cases*. New Delhi: Pearson Education.

Dess, G. G., Lumpkin, G.T. and Eisner, A.B. *Strategic Management*. New Delhi: Tata McGraw Hill.

Harrison, A. *Business Environment in a Global Context*. New Delhi: Oxford University Press.

Jauch, L., Gupta, R. and Gueck, W. *Business Policy and Strategic Management*. New Delhi: Frank Bros. and Company Limited.

Johnson, G. and Scholas, K. *Exploring Corporate Strategy*. New Delhi: Prentice Hall of India.

Kazmi, A. *Business Policy and Strategic Management*. New Delhi: Tata McGraw Hill.

Wheelen, T.L. and Hunger, J.D. *Strategic Management and Business Policy*. New Delhi: Pearson Education.

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Rajarshi Janak University
Faculty of Management



Level: Bachelor
Program: BDBM

Course: **Operation Management**

Course Code: BDBM-352

Area of Study: Core

Assessment Pattern: As per university rule

Credit Hrs: 3

Year: Third

Semester: Fifth

Lecture Hours: 48

Internal Assessment: 40 Marks

External Evaluation: 60 Marks

Course Introduction

Operations Management deals with planning, organizing, and controlling processes that transform input into goods and services. This course introduces core concepts, tools, and mathematical models from operations research used for managerial decision-making. It develops analytical and practical skills to improve productivity, quality, inventory control, and operational decision efficiency in manufacturing and service organizations, and introduces contemporary topics such as AI applications in operations.

Course Objectives

The course aims to enable students to:

- Provide foundational knowledge of operations management and its role in organizational strategy.
- Introduce mathematical models and quantitative techniques used in operations research.
- Equip students to analyse and improve processes for productivity, quality, and cost efficiency.
- Teach inventory, transportation, and assignment models for practical decision-making.
- Introduce quality management systems (TQM, Six Sigma, ISO) and statistical process control.
- Expose students to AI applications, system architecture and algorithms relevant to operations.

Learning Outcomes

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

- Explain operations management scope, the transformation process, and the role of the operations manager.
- Relate operations strategy to corporate and business strategies and propose suitable operations tactics.
- Apply product and service design principles, including value analysis and quality function deployment.
- Use statistical process control tools and understand TQM, JIT, and Six Sigma concepts.
- Formulate and solve transportation and assignment problems using standard methods.
- Construct basic decision models (decision trees, payoff matrices) and apply elementary game theory reasoning.
- Describe system analysis, functional architecture and basic AI algorithms (e.g., CNN basics) and evaluate AI adoption challenges in operations.
- Interpret productivity measures and recommend improvements based on case analysis.

Course Contents

Unit 1: Introduction

L.H. 7

- Definitions, scope and objectives of operations management
- Transformation process; production vs service operations
- Role and key issues for the operations manager
- Historical evolution of operations management
- Productivity: concepts, types and reading a productivity case

Unit 2: Operations Strategy

L.H. 4

- Operations strategy as a competitive weapon
- Linkage between corporate, business and operations strategy
- Components of operations strategy; manufacturing and service strategies

Case study discussions: real industry cases on quality failure, supply chain disruption, and productivity turnaround.

Unit 3: Product and Service Design

L.H. 5

- Concepts of product and service design; product development process
- Differences between product and service design


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- Emerging issues: value analysis, concurrent engineering, quality function deployment (QFD)

Productivity case analysis: class discussion and short report on productivity improvement case.

Unit 4: Quality System

L.H. 8

- Introduction and historical evolution of Total Quality Management (TQM)
- Philosophy, principles and concepts of TQM
- Costs of quality, quality control objectives and advantages
- Statistical Process Control (SPC); control charts for variables
- Just-In-Time (JIT) and Six Sigma fundamentals
- Quality management systems: ISO 9000 series; seven quality tools

Unit 5: Transportation Problem

L.H. 7

- Introduction and mathematical formulation
- Methods for initial basic feasible solution (North-West Corner, Least Cost, Vogel's Approximation)
- Testing optimality (MODI method) and handling minimization problems
- Applications and practical situation handling

Unit 6: Assignment Problem

L.H. 4

- Introduction, objectives and mathematical model
- Methods for minimization and maximization assignment problems
- Interpretation and practical applications

Unit 7: Decision Theory, Game Theory and Operations Research

L.H. 5

- Decision-making under certainty, risk and uncertainty (decision trees, payoff tables)
- Elementary game theory: two-person zero-sum games, saddle points, mixed strategies
- Selected OR models relevant to operations management

Game theory simulation: classroom payoff games and strategy reflection.

Unit 8: System Analysis, AI in Operations

L.H. 8

- System analysis: functional requirements and system architecture
- Algorithms overview and relevance to operations problems

- Convolutional Neural Network (CNN) fundamentals (conceptual, not deep code)
- AI applications in operations management: demand forecasting, quality inspection, scheduling, predictive maintenance
- Challenges in adopting AI: data, infrastructure, skills, ethics and change management

Suggested Books

1. Adam, E. E., and Jr. R. J. Ebert. *Production and Operations Management*. New Delhi: Prentice-Hall of India Private Limited.
2. Chase, R. B., F. R. Jacobs, N. J. Aquilano, and N. K. Agrawal. *Operations Management for Competitive Advantage*. New Delhi: Tata McGraw-Hill Publishing Company Ltd.
3. Dahlgaard, J. J., Kristensen, K., and G. K. Kanji. *Fundamentals of Total Quality Management: Process Analysis and Improvement*. London and New York: Taylor and Francis.
4. Frederick, S. H., and G. J. Lieberman. *Introduction to Operations Research*. New York: McGraw-Hill Education.
5. Gaither, N., and G. Frazier. *Operations Management*. Singapore: Thomson Asia Pvt. Ltd.
6. Krajewski, L. J., and L. P. Ritzman. *Operations Management*. Delhi: Pearson Education Pvt. Ltd.
7. Stevenson, W. J. *Operations Management*. New York: McGraw-Hill Education Ltd.
8. Taha, H. A. *Operations Research: An Introduction*. England: Pearson Education Ltd.
9. Mishra, K., & Mishra, S. (2025). Artificial and Emotional Intelligence for Employee Engagement with E-Human Resource Management. *Intellectuals' Book Palace*.

Nepal and International Context

- Local ISO certifications and quality initiatives (examples from Nepali firms and public sector).
- Examples from Nepali logistics and distribution networks (terrain and infrastructure constraints) for transportation problems.
- Standard references and best practices (ISO 9000 series, Six Sigma case studies).
- Methodological and algorithmic references from global journals and bodies (APICS/ASCM resources).
- AI in operations benchmark cases from manufacturers in developed markets.



Rajarshi Janak University Faculty of Management

Level: Bachelor
Program: BDBM
Course: Business Research Methods
Course Code: BDBM 353

Credit Hrs: 3
Year: Third
Semester: Fifth
Lecture Hours: 48

Internal Assessment: 40 Marks External Evaluation: 100 Marks (To be converted at 60 %)

Course Description

This course introduces students to the concepts, principles, and techniques of business research. It emphasizes the application of scientific methods to solve business and management problems. Students learn how to formulate research problems, review literature, design research studies, collect and analyze data, interpret findings, and prepare professional research proposals and reports. The course integrates quantitative and qualitative research methods and prepares students for project work and evidence-based managerial decision-making.

Course Objectives

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

- Explain the concept and significance of business research.
- Identify and formulate research problems.
- Conduct systematic literature reviews.
- Design appropriate quantitative and qualitative research studies.
- Develop research instruments and sampling plans.
- Apply ethical principles in business research.
- Analyze and interpret research data.
- Prepare research proposals and research reports.
- Conduct small-scale business research projects.

Learning Outcomes

After completing the course, students will be able to:

- Conduct business research independently.
- Develop research proposals.
- Design questionnaires.
- Apply sampling techniques.
- Analyze business data using basic statistical techniques.
- Write professional research reports.
- Make evidence-based managerial recommendations.

Course Contents



LH 8

Unit I: Introduction to Business Research

- Meaning and concept of research
- Nature and characteristics of scientific research
- Business research and management research
- Importance of research in business decision making
- Objectives of research
- Scientific research process
- Research ethics
- Research integrity
- Qualitative versus quantitative research
- Applied versus basic research
- Types of Research: Exploratory research, Descriptive research, Explanatory research, Experimental research, Action research, Evaluation research, Cross-sectional research and Longitudinal research

LH 8

Unit II: Research Problem and Literature Review

- Research Problem: Concept and Sources of research problems
- Identifying research problems
- Research objectives and Research questions
- Variables: Meaning and types
- Hypothesis: meaning, characteristics and types
- Literature Review: Meaning, Objectives and Importance
- Sources of literature
- Searching academic databases
- Literature Search Techniques (Google Scholar, Scopus)

LH 10

Unit III: Research Design and Sampling

- Research Design: Meaning, Importance, Characteristics and Components
- Types of Research Design: Exploratory, Descriptive, Explanatory, Survey, Case Study, Cross-sectional, Longitudinal and qualitative
- Sampling Design: Population, Census, Sample. Sampling Frame
- Characteristics of Good Sample and Sampling Process
- Types of Sampling Techniques: Probability and Non-probability Sampling frame
- Sample size determination

LH 10

Unit IV: Measurement, Scaling, and Data Collection

- Measurement: Concept and Levels of measurement
- Reliability and Validity: Concept and types

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- Measurement: Meaning and Importance
- Measurement Scales: Nominal, Ordinal, Interval and Ratio
- Scaling Techniques: Likert, Semantic Differential, Rating, Ranking, Thurstone, Guttman and Stapel
- Primary Data: Survey, Interview, Observation, Focus Group Discussion and Experiment
- Secondary Data: Government publications, Company reports, Books, Journals and Websites
- Questionnaire Design: Principles, Question wording, Sequence, Layout and Pilot testing

Unit V: Data Processing, Analysis, and Interpretation

LH 6

- Data Preparation: Editing, Coding, Classification, Tabulation and Data cleaning
- Descriptive Statistics: Frequency, Percentage, Mean, Median, Mode and Standard deviation
- Inferential Statistics: Correlation, Regression, Chi-square, t-test and ANOVA
- Software: Microsoft Excel and SPSS
- Interpretation of Results: Tables, Graphs, Charts and Managerial implications

Unit VI: Research Proposal and Report Writing

LH 6

- Research Proposal: Meaning, Importance and Components
- Proposal Format: Title, Background, Problem statement, Objectives, Research questions, Literature review, Methodology, Sampling, Data collection, Data analysis, Time schedule, Budget and References
- Research Report: Types, Structure, Executive summary, Introduction, Literature Review, Research Methodology, Findings, Discussion, Conclusion, Recommendations, APA referencing style, Citation techniques and Appendices

Recommended Textbooks

- Sekaran, U., & Bougie, R. (2021). *Research Methods for Business: A Skill-Building Approach* (9th ed.). Wiley.
- Cooper, D. R., & Schindler, P. S. (2023). *Business Research Methods* (14th ed.). McGraw-Hill.
- Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research Methods for Business Students* (9th ed.). Pearson.
- Kothari, C. R., & Garg, G. (2019). *Research Methodology: Methods and Techniques* (4th ed.). New Age International.
- Creswell, J. W., & Creswell, J. D. (2023). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (6th ed.). Sage.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate Data Analysis* (9th ed.). Cengage.



Rajarshi Janak University Faculty of Management



Level: Bachelor
Program: BDBM
Course: Understanding and Managing Data
Course Code: BDBM- 354

Credit Hrs: 3
Year: Third
Semester: fifth
Lecture Hours: 48

Internal Assessment: 40 Marks
External Evaluation: 60 Marks

Course Description

This course provides students with a comprehensive understanding of how organizations manage and use data as a strategic resource. It covers data management systems, databases, governance, analytics, and emerging technologies such as big data and cloud platforms. The course emphasizes managerial decision-making, business intelligence, and the role of data in digital transformation and organizational strategy.

Course Objectives

- To understand the importance of data in business decision-making
- To learn data management systems and database concepts
- To study data governance, quality, and security frameworks
- To understand business analytics and visualization techniques
- To explore modern data technologies such as big data and cloud systems

Learning Outcomes

After completing this course, students will be able to understand how data is collected, managed, and used in organizations. They will be able to evaluate data systems, apply basic analytical tools, assess governance and quality frameworks, and understand modern data ecosystems such as cloud and big data platforms. Students will also be able to use data insights for managerial decision-making.

Course Contents

1. Introduction to Data and Business Environment

LH: 6

Meaning of data, types of data, data lifecycle, structured vs unstructured data, data as a strategic asset, role of data in organizations, digital transformation, and data-driven decision-making, Data collection and integration


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2. Database Systems and Data Storage

LH:8

Database concepts, DBMS architecture, relational databases, ER model (conceptual), normalization basics, introduction to SQL, data storage systems, data lakes, data warehouses, data mart, KDD, Data mining techniques

3. Data Governance, Quality and Ethics

LH: 7

Introduction to data governance and governance frameworks; data quality concepts and dimensions; data cleaning, validation, and integrity; master data management (MDM); metadata management and data lineage; data ownership, stewardship, and accountability; data privacy, security, and compliance; ethical issues in data collection, analysis, and AI; fairness, transparency, bias, and responsible use of data.

4. Business Intelligence and Data Visualization

LH; 8

Business intelligence and frameworks, dashboards, KPIs, descriptive and diagnostic analytics, data visualization principles, decision support systems, effective data visualization reporting and data storytelling, charts graphs and interactive dashboards, introduction to tools like Excel, Power BI, and Tableau and AI-assisted analytics platforms

5. Data Analytics for Managerial Decision Making

LH:7

Types of analytics (descriptive, predictive, prescriptive), forecasting basics, linear and logistic regression, trend analysis, customer and business analytics, performance measurement, and data-driven strategy development.

6. Big Data and Cloud-Based Data Systems

LH: 6

Big data concepts (5Vs), distributed data systems, cloud-based data storage, data lakes vs warehouses, scalability, and data management in cloud environments.

7. Emerging Trends in Data Management

LH: 6

AI in data analytics, machine learning basics for business data, classification and clustering, real-time data systems, IoT-generated data, cybersecurity in data systems, and future trends in data-driven organizations.

Textbook

Herbert Dama. (2018). Data management and analytics for business. McGraw Hill Education.

Reference Books:

Thomas C. Redman. (2008). Data driven: Profiting from your most important business asset. Harvard Business Review Press.

Thomas H. Davenport, & Jeanne G. Harris. (2007). *Competing on analytics: The new science of winning*. Harvard Business School Press.

William H. Inmon. (2005). *Building the data warehouse (4th ed.)*. John Wiley & Sons.

Ralph Kimball, & Margy Ross. (2013). *The data warehouse toolkit: The definitive guide to dimensional modeling (3rd ed.)*. John Wiley & Sons.

Wes McKinney. (2017). *Python for data analysis: Data wrangling with pandas, NumPy, and IPython (2nd ed.)*. O'Reilly Media.

Foster Provost, & Tom Fawcett. (2013). *Data science for business: What you need to know about data mining and data-analytic thinking*. O'Reilly Media.



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Program: BDBM
Course: Business and Management Information System
Course Code: BDBM 355
Area of Study: Core
Nature of Course: Theory + Lab

Year: Third
Semester: Fifth
Credits Hrs: 3
Lecture Hours: 48

Internal Assessment: 20 + 20 (Lab) = 40 Marks
External Evaluation: 60 Marks

Course Description

This course provides an in-depth understanding of how information systems enable digital business and managerial decision-making in modern organizations. The course emphasizes digital platforms, data-driven business models, enterprise technologies, business analytics, digital innovation, and emerging technologies that are transforming industries and creating new business opportunities.

Course Objectives

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

1. Understand the role of information systems in digital business environments.
2. Analyze digital business models and platform-based ecosystems.
3. Apply business analytics and data-driven decision-making techniques.
4. Evaluate enterprise technologies and digital transformation strategies.
5. Understand the managerial implications of emerging technologies.
6. Design information-enabled solutions for business problems.

Course Outcomes

After completing this course, students should be able to:

- Explain how information systems create business value in the digital economy.
- Analyze digital business ecosystems and platform strategies.
- Utilize business intelligence and analytics tools for decision-making.
- Evaluate enterprise and cloud-based information systems.
- Assess cybersecurity, governance, and ethical issues.
- Develop digital business solutions using contemporary technologies.

Unit 1: Digital Business and Information Systems Foundations

LH: 6

- Digital Economy and Networked Organizations
- Business Information Systems and Digital Transformation
- Information Systems as Strategic Resources
- Digital Business Models and Value Creation
- Platform Economy and Network Effects
- Information Systems in Nepal's Digital Economy

Case Study: Digital ecosystem of eSewa and its impact on Nepal's digital economy.

Unit 2: Data-Driven Decision Making and Business Analytics

LH: 7

- Data as a Strategic Asset
- Data Lifecycle and Data Governance
- Business Intelligence and Analytics
- Descriptive, Predictive, and Prescriptive Analytics
- Data Visualization and Executive Dashboards
- Data-Driven Decision Making and Performance Management
- Introduction to AI-driven Analytics

Case Study: Customer analytics and recommendation systems of Netflix.

Unit 3: Digital Platforms and Enterprise Systems

LH: 6

- Platform-Based Business Models
- Enterprise Systems and Digital Integration
- Enterprise Resource Planning (ERP)
- Customer Relationship Management (CRM)
- Supply Chain Management (SCM)
- API Economy and Platform Integration

Case Study: Digital platform strategy of Amazon.

Unit 4: Database Systems and Business Applications

LH: 7

- Database Management Systems and Data Architecture
- Relational and NoSQL Databases
- Data Warehousing and Data Lakes
- Big Data Technologies and Applications
- Business Process Data and Process Mining
- Cloud Databases and Data Services
- Data Privacy and Governance

Case Study: Big data applications of Alibaba Group.

Unit 5: Cloud Computing and Digital Infrastructure

LH: 6

- Digital Infrastructure for Business
- Cloud Computing Models (IaaS, PaaS, SaaS)
- Virtualization and Container Technologies
- Mobile and Edge Computing
- Internet of Things (IoT) Infrastructure
- Digital Workplace and Remote Collaboration Technologies

Case Study: Cloud transformation journey of Microsoft.

Unit 6: Emerging Technologies and Business Innovation

LH: 6

- Artificial Intelligence and Machine Learning in Business
- Blockchain and Decentralized Applications
- FinTech and Digital Financial Services
- Robotic Process Automation (RPA)

- Industry 4.0 and Smart Business
- Generative AI and Intelligent Business Systems

Case Study: AI and automation initiatives of Tesla.

Unit 7: Cybersecurity, Digital Ethics, and Governance

LH: 5

- Cybersecurity in Digital Businesses
- Digital Risks and Business Continuity
- Privacy, Data Protection, and Compliance
- Ethical Issues in AI and Information Systems
- IT Governance and Digital Governance Frameworks

Case Study: The Equifax data breach and lessons for digital businesses.

Unit 8: Digital Strategy and Future of Business Information Systems

LH: 5

- Digital Transformation Strategy
- Digital Innovation and Business Model Innovation
- Smart Organizations and Intelligent Enterprises
- Sustainability and Green Information Systems
- Future Trends in Digital Business and Information Systems

Case Study: Digital transformation of Starbucks through mobile and data-driven strategies.

Practical/Lab Work

1. Business Analytics and Dashboard Development using Excel/Power BI
2. Database Design and SQL using MySQL
3. Cloud Applications and Collaboration Tools
4. ERP/CRM Demonstration and Digital Platform Analysis
5. Mini Project: Design of a Digital Business Solution and Presentation

Recommended Books

Textbooks

1. Laudon, K. C., & Laudon, J. P. (2024). *Management Information Systems: Managing the Digital Firm* (16th ed.). Pearson.
2. Baltzan, P., & Phillips, A. (2022). *Business Driven Information Systems*. McGraw-Hill.

Reference Books

1. Turban, E. (2023). *Information Technology for Management*. Wiley.
2. Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading Digital: Turning Technology into Business Transformation*. Harvard Business Review Press.
3. Rogers, D. L. (2016). *The Digital Transformation Playbook*. Columbia Business School Publishing.

