

IT 245: Business Information Systems

(BIM 6th Sem)

Credits: 3

Lecture Hours: 48

Course Objectives

The main objective of this course is to provide knowledge of different concepts of business information systems to students. After completing this course, students will be able to

- Understand different concepts of business information systems and their impact on organizations,
- Know about business processes,
- Know competitive advantage and strategic information systems,
- Understand concepts of Big Data, knowledge management, mobile commerce, and social computing,
- Understand concepts of SCM, CRM, and ERP systems,
- Understand and apply business analytics,
- Learn concepts of cloud computing and its uses in business.

Course Description

This course covers different concepts of business information systems including impact of IT on organizations, business processes, competitive advantage and strategic information systems, Big Data, knowledge management, mobile commerce, social computing, SCM, CRM, ERP, business analytics, and cloud computing.

Course Details

Unit 1: Introduction to Information Systems

3 LHs

Introduction; Why should we study information systems? Computer-Based Information System and Types; Impact of IT on Organizations; Importance of Information Systems to Society.

Unit 2: Organizational Strategy, Competitive Advantage, and Information Systems

6 LHs

Introduction; Business Processes; Business Process Improvement, Business Process Reengineering, and Business Process Management; Business Pressures, Organizational Responses, and Information Technology Support; Competitive Advantage and Strategic Information Systems.

Unit 3: Data and Knowledge Management

5 LHs

Introduction; Managing Data; Database Approach; Big Data; Data Warehouses and Data Mart, Knowledge Management.

Unit 4: Wireless, Mobile Computing, and Mobile Commerce

5 LHs

Introduction; Wireless Technologies; Wireless Computer Networks and Internet Access; Mobile Computing and Mobile Commerce; The Internet of Things.

Unit 5: Social Computing

4 LHs

Introduction; Web 2.0; Fundamentals of Social Computing in Business; Social Computing in Shopping, Marketing, Customer Relationship Management and Human Resource Management.

Unit 6: Information Systems within Organizations**6 LHs**

Introduction; Transaction Processing Systems; Functional Area Information Systems; Enterprise Resource Planning Systems; ERP Support for Business Processes.

Unit 7: Customer Relationship Management and Supply Chain Management**7 LHs**

Introduction; Defining Customer Relationship Management; Operational Customer Relationship Management Systems; Other Types of Customer Relationship Management Systems; Supply Chains; Supply Chain Management; Information Technology Support for Supply Chain Management.

Unit 8: Business Analytics**7 LHs**

Introduction; Managers and Decision Making; The Business Analytics Process; Descriptive Analytics; Predictive Analytics; Prescriptive Analytics; Presentation Tools

Unit 9: Cloud Computing**5 LHs**

Introduction; The Basics of Cloud Computing; Different Types of Clouds; Cloud Computing Services; The Benefits of Cloud Computing; Concerns and Risks with Cloud Computing; The “Big Three” Cloud Computing Vendors; Web Services and Service-Oriented Architecture.

Laboratory Works:

The laboratory work includes learning to use different systems and tools such as BigData systems, business analytics tools, and cloud computing infrastructures.

Suggested Readings

R. Kelly Rainer and Brad Prince, Introduction to Information Systems: Supporting and Transforming Business, 9th Edition, Wiley, 2022.

Kenneth C. Laudon, Jane P. Laudon and Carol G. Traver, Essentials of Management Information Systems, 15th Edition, Pearson, 2024.

Information Technology Essentials: Introduction to Information Systems Volume 1, Eric Frick, 2017.

Management Information Systems, James O'Brien and George Marakas, 10th Edition, McGraw Hill.