Course Objectives
At the end of the course, learners will be able to:

- Identify and describe various types of information systems
- Describe organizational and managerial foundations of information systems
- Evaluate the role of information systems in a business
- Analyze challenges posed by information systems and management solutions
- Describe the role of internet technologies in facilitating business processes. Assess contemporary hardware and software platforms and their trends
- Evaluate various tools for communication and e-business
- Analyze the business value of security and control
- Demonstrate how decision making process can be enhanced in an organization
- Design an enterprise information portal

Delivery Methodology
- Lectures
- Case Studies
- Group Projects

Course Content

Part 1: Organizations, Management, and the Networked Enterprise

1. Information Systems in Global Business Today
   a. Understanding the effects of information systems on business and their relationship to globalization
   b. Explain why information systems are so essential in business today
   c. Define an information system and describe its management, organization, and technology components
   d. Define complementary assets and explain how they ensure that information systems provide genuine value to an organization
   e. Describe the different academic disciplines used to study information systems and explain how each contributes to our understanding of them
   f. Explain what is meant by a sociotechnical systems perspective

2. Global E-Business and Collaboration
   a. Define and describe business processes and their relationship to information systems
   b. Evaluate the role played by systems serving the various levels of management in a business and their relationship to each other
   c. Explain how enterprise applications improve organizational performance
   d. Explain the importance of collaboration and teamwork in business and how they are supported by technology
   e. Assess the role of the information systems function in a business
3. Information Systems, Organizations, and Strategy  
a. Identify and describe important features of organizations that managers need to know about in order to build and use information systems successfully  
b. Demonstrate how Porter’s competitive forces model helps companies develop competitive strategies using information systems  
c. Explain how the value chain and value web models help businesses identify opportunities for strategic information system applications  
d. Demonstrate how information systems help businesses use synergies, core competencies, and network-based strategies to achieve competitive advantage  
e. Assess the challenges posed by strategic information systems and management solutions  

4. Ethical and Social Issues in Information Systems  
a. What ethical, social, and political issues are raised by information systems?  
b. What specific principles for conduct can be used to guide ethical decisions?  
c. Why do contemporary information systems technology and the Internet pose challenges to the protection of individual privacy and intellectual property?  
d. How have information systems affected everyday life?  

Part 2: Information Technology Infrastructure  

5. IT Infrastructure and Emerging Technologies  
a. Define IT infrastructure and describe its components  
b. Identify and describe the stages and technology drivers of IT infrastructure evolution  
c. Assess contemporary computer hardware platform trends  
d. Assess contemporary software platform trends  
e. Evaluate the challenges of managing IT infrastructure and management solutions  

6. Foundations of Business Intelligence: Database and Information Management  
a. Describe how the problems of managing data resources in a traditional file environment are solved by a database management system  
b. Describe the capabilities and value of a database management system  
c. Apply important database design principles  
d. Evaluate tools and technologies for accessing information from databases to improve business performance and decision making  
e. Assess the role of information policy, data administration, and data quality assurance in the management of a firm’s data resources  

7. Telecommunications, the Internet, and Wireless Technology  
a. What are the principal components of telecommunications networks and key networking technologies?  
b. What are the different types of networks?  
c. How do the Internet and Internet technology work, and how do they support communication and e-business?  
d. What are the principal technologies and standards for wireless networking, communication, and Internet access?  
e. Why are radio frequency identification (RFID) and wireless sensor networks valuable for business?  

8. Securing Information Systems  
a. Why are information systems vulnerable to destruction, error, and abuse?  
b. What is the business value of security and control?  
c. What are the components of an organizational framework for security and control?  
d. What are the most important tools and technologies for safeguarding information resources?  

Part 3: Key System Applications for the Digital Age  

9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications  
a. How do enterprise systems help businesses achieve operational excellence?  
b. How do supply chain management systems coordinate planning, production, and logistics with suppliers?  
c. How do customer relationship management systems help firms achieve customer intimacy?  
d. What are the challenges posed by enterprise applications?  
e. How are enterprise applications used in platforms for new cross-functional services?  

a. What are the unique features of e-commerce, digital markets, and digital goods?
b. What are the principal e-commerce business and revenue models?
c. How has e-commerce transformed marketing?
d. How has e-commerce affected business-to-business transactions?
e. What is the role of m-commerce in business, and what are the most important m-commerce applications?
f. What issues must be addressed when building an e-commerce Web site?

11. Managing Knowledge
a. What is the role of knowledge management and knowledge management programs in business?
b. What types of systems are used for enterprise-wide knowledge management and how do they provide value for businesses?
c. What are the major types of knowledge work systems and how do they provide value for firms?
d. What are the business benefits of using intelligent techniques for knowledge management?

12. Enhancing Decision Making
a. What are the different types of decisions and how does the decision-making process work?
b. How do information systems support the activities of managers and management decision making?
c. How do business intelligence and business analytics support decision making?
d. How do different decision-making constituencies in an organization use business intelligence?
e. What is the role of information systems in helping people working in a group make decisions more efficiently?

Part 4: Building and Managing Systems

13. Building Information Systems
a. How does building new systems produce organizational change?
b. What are the core activities in the systems development process?
c. What are the principal methodologies for modeling and designing systems?
d. What are the alternative methods for building information systems?
e. What are new approaches for system building in the digital firm era?

14. Managing Projects
a. What are the objectives of project management and why is it so essential in developing information systems?
b. What methods can be used for selecting and evaluating information systems projects and aligning them with the firm’s business goals?
c. How can firms assess the business value of information systems projects?
d. What are the principal risk factors in information systems projects?
e. What strategies are useful for managing project risk and system implementation?

15. Managing Global Systems
a. What major factors are driving the internationalization of business?
b. What are the alternative strategies for developing global businesses?
c. How can information systems support different global business strategies?
d. What are the challenges posed by global information systems and management solutions for these challenges?
e. What are the issues and technical alternatives to be considered when developing international information systems?

References
Core Text

Additional References
• Management Information Systems G.B. Davis & M.H. Olson; Mc Graw Hill
• Management Information Systems T. Lucey ; Letts Educational
• Management Information Systems, by Effy Oz.