

Guru Nanak Dev Engineering College, Ludhiana
Department of Computer Science and Engineering
Syllabus

M.Tech. (Computer Science and Engineering)
2019 Admission Batch Onwards

Subject Code: - MOCS-103
Subject Name: BUSINESS INFORMATION SYSTEM

Programme: M.Tech.(CSE)	L: 3 T: 0 P: 0
Semester: 3	Teaching Hours: 36 Hours
Theory/Practical: Theory	Credits: 3
Internal Marks: 50	Percentage of Numerical/Design/Programming Problems: 10%
External Marks: 100	Duration of End Semester Exam(ESE): 3hours
Total Marks: 150	Course Status: Open Elective

Prerequisites: None

Additional Material Allowed in ESE: - NIL

On completion of the course the student will have the ability to:

CO #	Course Outcomes
1.	To enrich the knowledge of Information System, its application and role in Modern Business and to analyze the impact of technology on development track.
2.	To elicit, analyze and architect the Data and to adapt Data Resource management approach.
3.	To analyze Integration of business and technology skills in a sector context.
4.	To use different business development methodologies and design a business strategy.
5.	To identify the various threats and security issues in Business Information System.

Detailed Contents:

UNIT-I

Understanding Information System in Business: Introduction to systems and Information System, Impact of IS in Business, Transformation from Old to Digital Economy, Components of IS, Resources that support BIS, Categories of BIS, E-business system, Computer in Business Development of Data Systems- Overview of Hardware and Software, Networks, Telecommunication and Internet, Scenario in India, Networking Technologies- Wi-Fi, WiMax, NextGen mobile networks, Data Capture and Computer Input / Output.

12 hours

UNIT-II

Data Resource Management: Differentiating Data and Information, Traditional Processing Systems, Database approach and its advantages, Components of database environment, Concepts of Data Warehousing, Data Mining and Tools, OLAP, Data Visualization, Data Centers, Fabric Data Centers, Server Farms, Big Data, Business Analytics.

06hours

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UNIT-III

10hours

Enterprise and Functional Business Systems: Classification of IS – TPS, MIS, DSS, AI, Expert Systems, NLP, Inventory Management (INMANS) System, Account Payable System (ACPAYS), Payroll System (PAYSY). **Developing & Implementing Business Systems-** Feasibility studies, Risk Management, SDLC, Phases, Implementation of Business Systems, Management of IS – Organizing data & information processing, roles & responsibilities of IS professionals.

UNIT-IV

09hours

Information System Security and Control: Threat of Project Failure, Threat of Accidents and Malfunctions, Threat of Computer Crime, Protecting Information System against Security Breaches, Factors that Increase the Risks, Methods for Minimizing Risks.

Text Books:

1. Paul Bocij, Andrew Greasley, Simon Hickie, "Business Information Systems: Technology, Development & Management".
2. PalgeBaltzan, "Business Driven Information System", McGraw Hill Publication.

References:

1. R. Kelly Rainer, Brad Prince, Watson, "Management Information System", Wiley Publication.
2. Nandan Kamath, "Guide to information technology act, rules and regulations", Universal Law Pub.

E-books and online learning material:

1. Business Information System by Elizabeth Hardcastle
<http://www.promeng.eu/downloads/training-materials/ebooks/business-information-systems.pdf>
Accessed on 25/12/2019.

Online Courses and Video Lectures:

1. <https://www.coursera.org/specializations/information-systems> Accessed on 25/12/2019.
2. <https://nptel.ac.in/courses/110/105/110105083/> Accessed on 25/12/2019.