DSEA03 – Accounting Information System

Masters of Commerce
Semester III
DSE – Elective Paper
Accounting Information System

Course Type/ Course Code	Course Title	Lectures	Tutorials	Practical	Credit	Pre-requisites
DSEA03	Accounting Information System	3	1	0	4	NIL

Objective: The Accounting Information Systems (AIS) course aims to equip students with a comprehensive understanding of how accounting processes are integrated with information technology to support business operations. Learners will explore key transaction cycles—revenue, expenditure, payroll, and production—analyzing their processes, documentation, and internal controls. The course emphasizes the design and evaluation of system flowcharts, risk management, and the implementation of effective control procedures. Practical applications include hands-on experience with accounting software to simulate real-world scenarios, enhancing students' ability to critically assess and improve AIS frameworks.

Learning Outcomes: On completion of this course, the students should be able to:

- Understand the foundational concepts of Accounting Information Systems (AIS) and their role in business processes and organizational decision-making.
- Apply documentation techniques and system narratives to analyse and design AIS structures.
- Evaluate and implement internal controls and audit mechanisms in AIS.
- Utilize advanced technologies like database management systems, ERP systems, and XBRL in the context of AIS for enhanced reporting and operational efficiency.
- Demonstrate familiarity with emerging technologies in AIS.

Contents:

Unit I **(12 Hours)**

Introduction to accounting information system; Theoretical foundations of AIS; Introduction to transaction processing and Enterprise resource planning (ERP) systems; Data processing modes and strategies; AIS development strategies; Tools used in systems analysis and design flowcharts and decision models.

Unit II **(12 Hours)**

Hierarchy of systems; System description; Systems model of an information processing system; Revenue cycle; Expenditure cycle – Purchase and cash disbursement procedures; Payroll processing and fixed asset procedures; Conversion cycle; Financial reporting and management reporting systems; General ledger and reporting cycle; Interface of accounting information and management system; Organization of accounting information System.

Unit III **(10 Hours)**

Prevalence, Prevention and Detection of Fraud in AIS; Information system control for system reliability, information security, confidentiality, integrity, and availability; Auditing computer-based information system- input control, processing control, output controls.

Unit IV **(11 Hours)**

Database management systems, REA approach to database modeling, Electronic commerce system; Applying XBRL in AIS; Cloud accounting system, Visual analytics software; Emerging technologies in AIS.

Tutorial Exercises:

The students are required to:

- Prepare a system flowchart and narrative for a typical revenue cycle, identifying source documents, processing steps, and internal controls.
- Review a case-based AIS and identify control weaknesses. Recommend improvements based on COSO principles.
- Create entity-relationship diagrams and sample tables for an AIS covering customers, suppliers, and transactions using MS Access or MySQL.
- Navigate through a demo ERP environment (e.g., SAP, Tally ERP 9) to enter sales and purchase transactions and generate reports.
- Design a simplified payroll system including employee database, salary computation, and pay-slip generation using Excel or OpenOffice Calc.
- Present a real-world accounting fraud case (e.g., Enron, Satyam). Identify how weaknesses in AIS contributed and what controls could have prevented it.
- Use a sample AIS data set to trace transactions from input to output. Evaluate whether an audit trail is sufficient and tamper-proof.
- Use a free trial of XERO or Zoho Books to record business transactions. Generate financial statements and evaluate ease of use and security features.

Suggested Readings:

- Bagranoff, Nancy A., Moscove, Stephen A., & Simkin, Mark G. (2005). Core Concepts of Accounting Information Systems. John Wiley & Sons Edition.
- Hall, James A. (2015). Accounting Information System. Cengage Publication.
- Hurt, Robert L. (2012). Accounting Information Systems: Basic Concepts and Current Issues. McGraw Hill.
- Robinson, Leonardo A., Davis, James R. & Alderman, C. Wayne (1990). Accounting Information Systems: A cycle Approach.Wiley.
- Romney, Marshall B., & Steinbart, Paul John (2014). Accounting Information Systems. Pearson Education Limited.
- Turner, Leslie Weickgenannt, Andrea, B. & Copeland, Mary, Kay (2016). Accounting Information Systems: Controls and Processes.Wiley.

Note: Latest edition of the readings may be used.