



## Diploma in Computerised Accounting (333) – Accounting Information Systems

<b>Prerequisites:</b> Knowledge of accounting and basic computing	<b>Corequisites:</b> A pass or higher in Diploma in BA & Computer Systems or equivalence.
<b>Aim:</b> The Accounting Information Systems combines accounting and information technology to meet the technology demands of all sectors of business. The course provides candidates with sufficient knowledge and practices to deal with problems and issues related to computer-based accounting information systems. Accounting Information Systems is a component of an integrated enterprise system. The REA mode is used as a framework for analysing the relationship between an organisation's critical resources, events and agents. Candidates analyse how database software is used to convert business models into physical models. Candidates also analyse the system development life cycle.	
<b>Required Materials:</b> Recommended Learning Resources.	<b>Supplementary Materials:</b> Lecture notes and tutor extra reading recommendations.
<b>Special Requirements:</b> The course requires a combination of lectures, demonstrations and class discussions.	
<p><b>Intended Learning Outcomes:</b></p> <p>1 Define Accounting Information System</p> <p>2 Understand the transaction processing concepts and techniques</p> <p>3 Understand broad issues pertaining to ethics, fraud, and internal control</p> <p>4 Analyse tasks performed in the revenue cycle</p>	<p><b>Assessment Criteria:</b></p> <p>1.1 Describe the primary information flows within the business environment</p> <p>1.2 Contrast accounting information systems and management information systems</p> <p>1.3 Contrast financial transactions against non-financial transactions</p> <p>1.4 Analyse the functional areas of a business</p> <p>1.5 Discuss the roles of accountants in an information system</p> <p>2.1 Analyse the transactions processed by the different transaction cycle</p> <p>2.2 Describe the basic accounting records used in transaction processing</p> <p>2.3 Analyse documentation techniques</p> <p>2.4 Contrast batch and real-time processing and the impact of these technologies on transaction processing</p> <p>3.1 Discuss ethical issues related to the use of information technology</p> <p>3.2 Distinguish between management fraud and employee fraud</p> <p>3.3 Explore common types of fraud schemes</p> <p>3.4 Analyse key features of an internal control framework</p> <p>3.5 Describe objects and application of physical controls</p> <p>4.1 Describe functional departments in the revenue cycle and the flow of revenue transactions through the organisation</p> <p>4.2 Define the documents, journals, and accounts needed for audit trails, the maintenance of records, decision</p>




5	Understand the tasks performed during purchases and cash disbursement processes	<p>making, and financial reporting</p> <p>4.3 Explore risks associated with the revenue cycle and the controls that reduce these risks</p> <p>4.4 Investigate the operational and control implications of technology used to automate and reengineer the revenue cycle</p> <p>5.1 Describe departments involved in purchases and cash disbursement activities and the flow of these transactions through the organization</p> <p>5.2 Analyse documents, journals, and accounts that provide audit trails, promote the maintenance of records, and support decision making and financial reporting</p> <p>5.3 Explore risks associated with purchase and cash disbursement activities and the controls that reduce these risks</p> <p>5.4 Investigate operational features and the control implications of technology used in purchases and cash disbursement systems</p>
6	Understand the fundamental tasks of payroll and fixed asset processes	<p>6.1 Explore the functional department of payroll and fixed asset activities and the flow of transactions through the organization</p> <p>6.2 Analyse documents, journals, and accounts needed for audit trails, record maintenance, decision making, and financial reporting</p> <p>6.3 Evaluate exposures associated with payroll and fixed asset activities and the controls that reduce these risks</p> <p>6.4 Investigate operational features and the control implications of technology used in payroll and fixed asset systems</p>
7	Understand the conversion cycle	<p>7.1 Describe the elements and procedures of production process</p> <p>7.2 Analyse data flows and procedures in a traditional cost accounting system</p> <p>7.3 Describe accounts control procedures</p> <p>7.4 Describe operating features, philosophies, and technologies of a healthy and competitive company</p> <p>7.5 Evaluate just-in-time systems and the implications of maintaining excessive inventories</p> <p>7.6 Describe the importance of quality in an organisation</p>
8	Understand financial reporting and management reporting systems	<p>8.1 Describe the features, advantages, and disadvantages of various coding schemes</p> <p>8.2 Analyse operational features of the General Ledger System (GLS), Financial Reporting Process (FRS), and Management Reporting Systems (MRS).</p> <p>8.3 Explore the principle operational</p>

9 Understand database management systems	<p>controls governing the GLS and FRS</p> <p>8.4 Describe factors that influence the design of the MRS</p> <p>8.5 Discuss elements and responsibilities of an accounting system</p> <p>9.1 Explore problems inherent in the flat file approach to data management that gave rise to the database concept</p> <p>9.2 Describe relationships among the defining elements of the database environment</p> <p>9.3 Describe anomalies caused by un-normalised databases and the need for data normalisation</p> <p>9.4 Demonstrate stages in database design: entity identification, data modeling, constructing the physical database, and preparing user views</p> <p>9.5 Describe features of distributed databases and issues to consider in deciding on a particular database configuration</p>
10 Understand the Resources, Events and Agents (REA) approach to business process modeling	<p>10.1 Analyse limitations of traditional database systems</p> <p>10.2 Describe benefits of an REA approach to information systems</p> <p>10.3 Describe implications of REA for the accounting</p> <p>10.4 Demonstrate steps in preparing an REA model of a business process</p> <p>10.5 Discuss the importance of identifying the attributes of entity relations in relational database design</p> <p>10.6 Explore the differences between REA model representations and ER diagram representations</p>
11 Understand the functionality and key elements of Enterprise Resource Planning (ERP) systems	<p>11.1 Define ERP configurations</p> <p>11.2 Discuss data warehousing as a strategic tool and issues related to the design, maintenance, and operation of a data warehouse</p> <p>11.3 Identify risks associated with ERP implementation</p> <p>11.4 Analyse key considerations related to ERP implementation</p> <p>11.5 Describe internal control and auditing implications of ERPs</p> <p>11.6 Discuss the leading ERP products and their distinguishing features</p>
12 Understand the development process of eCommerce Systems	<p>12.1 Describe topologies that are employed to achieve connectivity across the Internet</p> <p>12.2 Analyse protocols and the specific purposes served by several Internet protocols</p> <p>12.3 Discuss business benefits associated with Internet eCommerce</p> <p>12.4 Explore different internet business models</p>

13 Understand the Systems Development Life Cycle (SDLC)	<p>12.5 Describe risks associated with intranet and Internet eCommerce</p> <p>12.6 Explore issues of security, assurance, and trust pertaining to eCommerce</p> <p>12.7 Discuss eCommerce implications for the accounting profession</p> <p>13.1 Identify the key stages in the SDLC</p> <p>13.2 Describe how a firm's business strategy shapes its information system</p> <p>13.3 Analyse the relationship between strategic systems planning and legacy systems</p> <p>13.4 Analyse the systems analysis stage</p> <p>13.5 Demonstrate the TELOS model for assessing project feasibility</p> <p>13.6 Discuss cost-benefit analysis issues related to information systems projects</p> <p>13.7 Analyse the role of accountants in the SDLC</p>
14 Understand how to construct, deliver, and maintain systems projects	<p>14.1 Analyse the sequence of events that constitutes the in-house development phase of SDLC</p> <p>14.2 Analyse the tools used to improve the success of systems construction and delivery activities: CASE tools; PERT and Gantt charts</p> <p>14.3 Distinguish between structured and object-oriented design approaches</p> <p>14.4 Demonstrate multi-level DFDs in the design of business processes</p> <p>14.5 Analyse the different types of systems documentation and the purposes they serve</p> <p>14.6 Describe the role of accountants in the construction and delivery of systems</p> <p>14.7 Describe the advantages and disadvantages of commercial software</p>
15 Understand corporate responsibility and IT governance	<p>15.1 Describe key features of corporate responsibility for financial reports and management assessment of internal controls</p> <p>15.2 Describe management and auditor responsibilities regarding financial reports and assessment of internal controls</p> <p>15.3 Discuss risks of incompatible IT functions.</p> <p>15.4 Analyse controls and security of an organization's computer facilities</p> <p>15.5 Describe key elements of a disaster recovery plan</p>
16 Understand security systems and access control for businesses	<p>16.1 Demonstrate threats to the operating system and analyse internal controls to minimise them</p> <p>16.2 Demonstrate threats to database integrity and analyse internal controls to minimise them</p> <p>16.3 Identify risks associated with eCommerce and analyse internal controls</p>

	16.4 to reduce them Identify exposures associated with electronic data interchange (EDI) and analyse internal controls to reduce them
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### **Recommended Learning Resources: Accounting Information Systems**

<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Core Concepts of Accounting Information Systems by Nancy A. Bagrahoff, Mark G. Simkin and Carolyn Strand Norman. ISBN-10: 0470045590</li> <li>• Accounting Information Systems, International Edition by James Hall. ISBN-10: 0324560931</li> <li>• Accounting Information Systems: International Version by Marshall B. Romney and Paul J. Steinbart. ISBN-10: 0135009375</li> </ul>
<b>Study Manuals</b> 	BCE produced study packs
<b>CD ROM</b> 	Power-point slides
<b>Software</b> 	QuickBooks