

Accounting Information System

Program/Semester: MBA/Fourth Semester

Course Title: Accounting Information System

Course Code: ACC 644

Credit Hours: 3

Lecture Hours: 45

Nature: Concentration (Accounting)

Course Objectives

The objectives of this course are to provide students with extensive knowledge of Accounting Information System (AIS) and make them able to apply the understanding through the use of an accounting system in the business process.

Course Description

This course aims to provide exposure on the accounting information system focusing on identifying the information needs to the decision makers and developing appropriate business process control in the design of accounting information systems. It further emphasizes on applying REA Data Model in the control process. It covers the conceptual foundation of accounting information system, data analytics, control and audit of accounting information system, accounting information system applications and the system development process.

Learning Outcomes

By the end of the course students should be able to understand:

- The basic activities performed in the major business cycles
- What data are needed to plan, evaluate and control the business activities
- How to design an AIS to provide the information to make right decisions
- The fundamental concepts of database technology & data modelling effect on an AIS

Course Contents

Unit 1: Conceptual Foundation of Accounting Information System LH 7

Introduction to accounting information systems; Information needs; Transaction processing: The data processing cycle; Enterprise resource planning systems; Systems documentation techniques: Data flow diagram, flow charts, business process diagram

Unit 2: Data Analytics LH 4

Introduction; Database system; Relational databases; Data analytics in accounting; Transforming data; Data analysis and presentation

Unit 3: Control and Audit of Accounting Information System (AIS) LH 18

Introduction; AIS threats and fraud; Preventing and detecting frauds and abuse; Computer fraud and abuse techniques: Computer attacks and abuse, social engineering, malware; Control and AIS: Control concepts and frameworks; internal environment; Objective setting and event identification, risk assessment and response; Control activities; Information, communication & monitoring; Controls for information security: Concepts, targeted attacks; Preventive controls; Detective control; Corrective controls; Confidentiality and privacy controls; Processing integrity and availability controls; Auditing computer-based information systems

Unit 4: Accounting Information Systems Applications LH 5

Introduction; The revenue cycle: Sales to cash collections; The expenditure cycle: Purchasing to cash disbursements; The production cycle; The human resources management and payroll

cycle; General ledger and reporting system

Unit 5: The Resource, Events and Agents (REA) Data Model

LH 6

Introduction to REA model; Developing an REA diagram; Integrating REA diagrams across cycles; Rules for combining REA diagrams; Implementing an REA model in a relational database; Using REA diagrams to retrieve information from a database

Unit 6: The System Development Process

LH 5

Introduction; Systems analysis; AIS development strategies; Systems design, Implementation and operation

Prescribed textbook:

Romney, M. B. & Steinbart, P. J. (2015). *Accounting Information Systems*. 13th Ed. Delhi: Pearson.

Suggested reference:

Savage, A.A., Brannock, D. & Foksinska, A. (2022). *Accounting Information Systems: Connecting Careers, Systems, and Analytics*. Wiley.



Advanced Management Accounting

Program/Semester: MBA/Fourth Semester

Course Title: Advanced Management Accounting

Course Code: ACC 645

Credit Hours: 3

Lecture Hours: 45

Nature: Concentration (Accounting)

Course Description

This course is designed to focus on the identification and application of advanced management accounting techniques for decision-making in a specific area. This course also enables the students to identify the deviation during performance measurement of cost centers, revenue and profit centers for taking remedial action of the management.

Course Objectives

The objective of this course is to provide the students with an in-depth knowledge of management accounting, to enable them to (i) apply management accounting techniques for analyzing the information, and presenting it to management for decision-making and control purposes, and (ii) formulate strategic plans for achieving efficiency and effectiveness in the operation of business.

Learning Outcomes:

By the end of the course students should be able to:

- obtain detailed knowledge on the area of modern concepts of management accounting.
- comprehend the purpose of forecasting, planning and budgeting.
- identify steps in budget preparation and get acquainted with the different types of budgets.
- comprehend capital investment decisions and calculate npv and irr and discounted payback period.
- prioritize projects that are mutually exclusive, of unequal lives and subject to capital rationing.
- apply the throughput and backflush accounting and environmental costing for better decision-making.
- forecast cash flow based on financial statements.
- apply the tools of management accounting in managing and controlling accounts receivables and payables.

Contents

Unit 1: Introduction to Management Accounting **LH 5**

Meaning and importance of Management Accounting- tools of Management Accounting (descriptive, analytical, diagnostic, and predictive); skills required for management accountants- strategic role of management accountants- functions of management accountants.

Unit 2: Developments in the Business Environment **LH 8**

The impact of changing environment on management accounting; total quality management (TQM); activity-based costing, activity-based management and activity-based budgeting; target costing, life cycle costing, value chain analysis, cost control and cost reduction, computer-aided manufacturing, just in time (JIT), manufacturing resources planning (MRP I & II), synchronous manufacturing, business process re-engineering, theory of constraints.

Unit 3: Forecasting and Budgeting Techniques **LH 12**

Budgeting: need of budgets, framework for budgeting, steps in budget preparation, interpretation of master budget for manufacturing and non-manufacturing concerns,

monitoring procedures, fix and flexible budgets, preparation of projected profit and loss account and balance sheet.

Unit 4: Project Appraisal Methods

LH 6

Capital investment decisions: the process of investment decision making, payback method, post audit, discounted cash flow (DCF) techniques of investment appraisal: discounted payback, the net present value method, the internal rate of return method, NPV and IRR comparison.

Additional aspects of investment decision-making: mutually exclusive projects with unequal lives, asset replacement, project abandonment, capital rationing, sensitivity analysis, probability analysis and long-term decisions.

Unit 5: Modern Costing Techniques

LH 4

Concept of Throughput and Backflush Accounting; the theory of constraints (TOC), Throughput Accounting, Environmental costing: the importance of environmental costs, environmental footprints, types of cost, environmental cost accounting.

Unit 6: Managing Short-Term Finance

LH 6

Cash flow forecasts: cash flows and profit, purpose of cash forecasts, cash budgets in receipts and payments format, cleared funds cash forecasts, cash forecasts based on financial statements.

Cash management: need for cash management, budgeting for borrowings, overdrafts, loans, trade payables as a source of finance, export finance, cash surpluses, cash investments: concept of bank and building society accounts, marketable securities: prices and interest rates, other types of investment.

Unit 7: Receivables & Payables Management

LH 4

Concept of credit control, total credit, the credit cycle, payments terms and settlement discounts, maintaining information on receivables, collecting debts, credit insurance, factoring and invoice discounting, managing payables.

Prescribed textbooks:

Atkinson, A. A., & Kaplan, R. S. (2005). *Advanced Management Accounting* (3rd ed.). Prentice Hall of India, New Delhi.

Lal, J. (2003). *Advanced Management Accounting* (1st ed.). New Delhi: Pearson Education Pvt. Ltd.

Suggested references:

Atkinson, A. A., Kaplan, R. S., Matsumura, E.M., Young, S.M & Kumar, G. A. (2012). *Management Accounting* (6th ed.). New Delhi: Pearson Education Pvt. Ltd.

Garison R.H., Noreen, E.W. and Brewer, P.C. (2015). *Managerial Accounting* (15th ed.). New York: McGraw Hill Education.

Hilton, R.W., Ramesh, G., & Madugula, J (2011). *Managerial Accounting*. New Delhi: Tata Mc GrawHill Education Pvt. Ltd.