

**UNITED NATIONS CONFERENCE ON TRADE
AND DEVELOPMENT**

Geneva

**Model Accounting Curriculum
(Revised)**



UNITED NATIONS

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MODEL ACCOUNTING CURRICULUM

Introduction

The following model curriculum is a revision of the curriculum that was developed in 1999 by UNCTAD, together with experts from the Arab Society of Certified Accountants, the Association of Chartered Certified Accountants, the Certified General Accountants of Canada, the European Commission, FIDEF, the Institute of Chartered Accountants of Scotland, the Polish Accounting Standards Board, the International Federation of Accountants, and representatives from academia and international accounting firms acting in their personal capacities (publication reference: UNCTAD/ITE/EDS/9). The purpose of the detailed curriculum is to describe for the international community the technical subject areas that an individual must master to become a professional accountant.

The detailed curriculum is only one part of a larger exercise to create a benchmark for the qualifications of professional accountants which if followed would enable them to better function in and to better serve the global economy. The components of such a system include:

- (a) general knowledge and skills;
- (b) professional (technical) education;
- (c) professional examinations;
- (d) practical experience;
- (e) continuing professional education; and
- (f) a certification scheme.

All these are described in the UN/UNCTAD document TD/B/COM.2/ISAR/5, entitled “Development of a global accounting curriculum and other qualification requirements”.

The benchmark was developed for the international community as a whole in order to promote global harmonization of professional qualification requirements. Such harmonization would close the gaps in national training systems, cut the cost of mutual recognition agreements and increase trans-border trade in accountancy services. While there are international standards for the provision of the service of accounting, there are no global standards for the service providers.

To see the curriculum in the proper prospective, it should be read with five caveats in mind. First, The MC is for the formal education of professional accountants at the highest level in every country of the world – not just for developing countries. Many education/training institutions, however, are not capable or ready to adopt/adapt the MC. Therefore; certain pre-conditions have to exist before an institution embarks on an implementation program.

Second, the detailed curriculum is intended to serve as a guide to the technical content of the education/training of the professional accountant. It should be distinguished from the basic general knowledge, skills and practical experience that aspirants also need to function in an interdependent economy. It is not sufficient for persons aspiring to become professional accountants to possess only theoretical knowledge. Accountants must be able to apply the theoretical knowledge in practical, real-life situations by obtaining, analyzing, interpreting, synthesizing, evaluating and communicating information. Many believe that these skills are best acquired during a period of general education, prior to and integrated into professional education. It should also be recognized that individuals obtain general knowledge, skills, and practical experience through a) an education program with an internship component, b) a required period of practical experience after graduation, and c) a continuing education program during their professional careers. Supervised and mentored practical training can, if clear education objectives are formulated, complement theoretical higher education.

Third, there are a number of approaches to global accounting education. One approach is prescriptive and specifies the general and technical education professional accountants need to develop the required skills. It is best thought of as an “input” approach. Another approach is the competency-based approach, where competency is defined as the ability to perform

activities within an occupation or function to the standards expected in employment. It then specifies what basic competencies professional accountants need. It looks at competencies as “outputs” or “outcomes” and then works backwards to specify the education necessary to achieve these “outcomes”. Even though the competency approach in professional education is progressing in many countries, the process and the outcomes are still in their early stages. The experts, therefore, have chosen the more traditional approach, that is, to develop a curriculum for accounting education rather than to follow a competency-based approach. The choice of the input approach was also influenced by the fact that developing countries had asked for explicit guidance on curricula and that the latter might be more easily implemented than a competency-based system. The 2003-revised edition of the MC still adheres to the input approach.

Fourth, since the detailed curriculum is merely the starting point for a country desiring to harmonize its educational system to meet global requirements, the input approach, on which the MC is built, can be reconciled with the competency-based approach in the implementation process, if so desired. To do so, an institution/country need to start the implementation process by: a) determining the desired qualitative features of its accounting professionals to function successfully in its specific environment; b) developing an institution-specific mission considering prevailing academic and professional infrastructures and existing strength and challenges, c) examining the contents of

existing courses against the MC to decide how relevant existing courses are in serving local needs and constituencies, d) developing a matrix to integrate needed skills with technical and professional content of the MC e) incorporating appropriate assessment methodologies e) converting the MC modules into courses and/or training programs and deciding on course identification and sequence, f) developing corresponding syllabuses and determining time to be spent on each course, and finally g) assessing outcomes.

Fifth, and lastly, the MC is a living document. It should be changed as needed to ensure compliance with IFAC's IES and to reflect new developments in professional, technical, and economic issues as well as updates in technology.

It should be mentioned that the detailed curriculum was developed after a review of seven national curricula. It is thus based on existing international guidance and the curricula of selected professional organizations, which are known for their high quality. The major headings for the various modules are grouped under classifications contained in the International Federation of Accountants' (IFAC) *Pre-qualification Education, Assessment of Professional Competence and Experience Requirements of Professional Accountants, International Educational Guideline (IEG) No. 9 (revised 1996)* and *Information Technology in the Accounting Curriculum, IEG No. 11*

(revised 1998)*. UNCTAD also relied heavily on the curriculum of the Association of Chartered Certified Accountants and that of the Certified General Accountants of Canada. These were supplemented with selected items that were identified in UNCTAD's review of the curricula of other national organizations. UNCTAD wishes to extend its thanks to these professional organizations for allowing portions of their curricula to be included.

* Currently being converted by IFAC Education Committee into International Education Standards for Professional Accountants

1. Organizational and Business Knowledge

1.1. Module on economics

The objective of this module is to provide candidates with an understanding of the issues, concepts and theories of microeconomics and macroeconomic. Accounting is concerned with the identification, measurement, and communication of data revealing socio-economic activities of an entity for the purpose of facilitating decision making by all interested parties in their effort to efficiently and effectively allocate their scarce resources. Economic data is the primary input for the accounting functions. It is imperative, therefore, for accountants to thoroughly understand the field of economics. In this module, students learn some analytical and critical thinking tools used by economists and are provided with opportunity to practice their use. This includes the practical application of economic reasoning for forecasting and solving problems in business, industry, and government. Individuals are expected to have an understanding of how their national economy functions, as well as how other national economies function. They should also understand how their national economy interacts with the global economy and appreciate the importance of international trade, and the effects of changes in foreign exchange rates and balances of payments in the performance of the business. On completion of this module the individual should be able to:

- demonstrate a solid knowledge of the vocabulary associated with the principles of macro and microeconomics.
- demonstrate a basic understanding of the theories associated with the principles of macro and microeconomics.
- evaluate world trade activities and government policy with respect to economics.
- better comprehend economic and financial events and identify how they affect the environment of accounting.
- have a solid foundation which will enable them to understand and recognize the nature of economic events and their impact on accounting functions.
- have an understanding of the role of accounting in a market-based economy
- have a grasp of the free enterprise system and the role of the financial market in the global economy.

1.1.1 Economics questions, economic methods and the market

- (a) Basic economic issues, emphasizing the fundamental problem in economics which is the concept of scarcity, i.e. since resources (financial, material, time, etc.) are scarce, individuals as well as organizations are forced to make choices thus creating economic events.
- (b) The function and working parts of the nation's economy

- (c) Main alternative economic systems in the world
- (d) Economic theories and models, including:
models of relationships between economic variables at the micro and macro economic levels; the types of economic models; and mathematical and statistical techniques used in constructing economic models
- (e) Property rights and money
- (f) Demand and changes in demand
- (g) Supply and changes in supply
- (h) Price determination
- (i) Communicating economic data using graphs

1.1.2 Elasticity, price regulation and consumer choice

- (a) Price elasticity of demand
- (b) Other elasticities of demand
- (c) Elasticity of supply
- (d) Price regulation
- (e) Choices that consumers make
- (f) Utility and utility maximization
- (g) Consumer surplus
- (h) Formulas and equations used in economics
- (i) Forecasting: the use of objective data and subjective judgment to assess the future values of certain economic factors; and demand forecasting

1.1.3 Production and the enterprise's economic policies

- (a) The enterprise's economic problems
- (b) Elementary business finance
- (c) Historical costs and opportunity costs as economic concepts
- (d) The efficiency of enterprises
- (e) The enterprise's objectives and constraints
- (f) Short-term costs
- (g) Long-term costs
- (h) Cost minimization
- (i) The enterprise's costs, technology and input prices

1.1.4 Market structures: competition and monopoly

- (a) The function of market in allocating scarce economic resources
 - (i) Goods and services
 - (ii) Financial markets
- (b) Types of market structures
- (c) The concept of perfect competition
- (d) Profit-maximization strategies of a competitive firm
- (e) Competitive industry in the long run
- (f) Why perfect competition is efficient
- (g) Monopolies and why they arise
- (h) The monopoly's profit-maximization price and output
 - (i) Price determination
 - (j) Monopolies and efficiency issues
 - (k) Rent-seeking and why it arises

- (l) Competition and monopoly at the domestic level

1.1.5 Market structures: monopolistic competition and oligopoly

- (a) The definition of monopolistic competition and oligopoly
- (b) Price and output in a monopolistically competitive industry
- (c) The efficiency of monopolistic competition
- (d) Price/profit strategies of enterprises in an oligopolistic industry
- (e) Price and output behavior of a cartel
- (f) Monopolistic competition and oligopoly at the domestic level
- (g) Information as an economic resource
- (h) Market failure and government action to overcome it

1.1.6 National economic issues and measure of performance

- (a) The costs and other aspects of unemployment
- (b) Inflation and its effects
- (c) The theory of imperfect competition in the market place
- (d) Gross domestic product (GDP), nominal GDP and real GDP
- (e) Growth and fluctuations in the nation's economy
- (f) The government's budget deficit
- (g) Measuring the national price level

- (h) GDP as a measure of economic performance and economic welfare

1.1.7 Expenditure decisions

- (a) Aggregate expenditure and its components
- (b) Consumption and saving decisions
- (c) The role of investments in the national economy
- (d) Net exports
- (e) Aggregate planned expenditure and real GDP
- (f) Equilibrium expenditure
- (g) The concept of the multiplier effect
- (h) Fiscal multipliers

1.1.8 Money, banking and interest rates

- (a) The nature of money
- (b) Financial intermediaries
- (c) Money creation
- (d) The national bank and its influence on the money supply
- (e) Demand for money
- (f) How interest rates are determined
- (g) The national bank's influence on aggregate national expenditures
- (h) Fiscal policies, interest rates and investment

1.1.9 Unemployment and inflation

- (a) Aggregate demand and what determines it
- (b) Aggregate supply and what determines it
- (c) Macroeconomic equilibrium

- (d) Wages and employment
- (e) Unemployment
- (f) Expectations
- (g) Expectations and macroeconomic equilibrium
- (h) Inflation

1.1.10 The global environment

- (a) Comparative advantages and gains from trade
- (b) The theory and practice of free trade and problems of protectionism
- (c) Foreign exchange controls and its effects and risks
- (d) Trade restrictions
- (e) Economic relations between developed and developing nations; problems of debt and development
- (f) Single market agreements, such as the European Union
- (g) Regional trade agreements, such as the North American Free Trade Agreement (NAFTA), the South American Common Market (MERCOSUR) and the Economic Community of West African States (ECOWAS)
- (h) International trade agreements such as the General Agreement on Trade in Services (GATS) and the World Trade Organization (WTO)
- (i) International institutions such as the World Bank and the International Monetary Fund (IMF) and their role in the world economy

- (j) Balance-of-payments accounts and implications of policies to achieve equilibrium
- (k) Financing international payments deficits
- (l) Exchange rate determination and alternative exchange rate regimes including the European Exchange Rate Mechanism (ERM)
- (m) Foreign exchange markets
- (n) Policies for national and international growth and development

1.2. Module on quantitative methods and statistics for business

The objective of this module is to provide an understanding of how to calculate and use certain quantitative tools in practical business, industrial and governmental applications. After the methods of making the calculations are understood, computers are useful tools to perform the actual calculations. On completion of this module the individual should be able to:

- know how to formulate a problem in mathematical terms, solve the problem and be able to interpret the results.
- understand and apply statistical techniques, including methods of presentation of data, which are appropriate in a business environment.
- identify the accounting areas which can utilize the quantitative tools and techniques presented in this module to give them context and give examples

- understand the use and limitations of these tools and techniques.

1.2.1 Basic arithmetic operations with implications to accounting

- (a) Arithmetic procedures, powers and roots, and logarithms
- (b) Percentages and ratios
- (c) Simple and compound interest concepts and nominal and effective interest rates
- (d) Discounted cash flows, net present values and internal rates of return measurements
- (e) The use of computers for arithmetic operations

1.2.2 Basic concepts of statistics - The measurement of uncertainty

- (a) Probability concepts, addition and multiplication laws, and tree diagrams
- (b) Normal distribution concepts
- (c) Variance to expected values
- (d) Expectation concepts and their application to decision problems
- (e) Populations and samples
- (f) Frequency distributions
- (g) Measures of central location
- (h) Measure of dispersion

1.2.3 Statistical presentation as an aid to reporting information, such as histograms, pie charts,

ogives, pictograms, frequency polygons and the Lorenz curve;

1.2.4 The use of computer to generate statistical presentations of data and in generating and showing these presentations;

1.2.5 Mathematical decision models to represent the relationship among elements relevant to a given situation and to determine the effects in external and internal conditions;

1.2.6 Fundamentals of probability

- (a) Basic probability concepts
- (b) Basic counting rules
- (c) Probability rules
- (d) Probability distributions

1.2.7 Probability distribution

- (a) Binomial distribution
- (b) Continuous probability distributions
- (c) Normal probability distribution

1.2.8. Sampling and sampling distributions

- (a) Sample designs
- (b) Sample statistics -
- (c) The sampling distribution of x
- (d) The t-distribution

1.2.9 Statistical estimation

- (a) Properties of estimators
- (b) Interval estimation
- (c) Sample size determination
- (d) Applications to auditing

1.2.10 Hypothesis testing

- (a) Basic concepts of hypothesis testing
- (b) Hypothesis tests on the mean
- (c) Hypothesis tests on the proportion
- (d) Interval estimation and hypothesis testing

1.2.11 Regression, correlation, multiple regression, index numbers, and time series

- (a) Simple linear regression
- (b) Correlation
- (c) Regression analysis
- (d) Multiple regression
- (e) Examination of regression assumptions
- (f) Index numbers and time series
- (g) Testing models

1.2.12 Statistical decision theory

- (a) Probability rules and Bayes' rules
- (b) Probability/decision trees

1.2.13 Matrices and linear programming

- (a) Matrices
- (b) Graphic linear inequalities
- (c) The linear programming model
- (d) Graphical sensitivity analysis
- (e) Use of the computer for linear, non-linear, and integer programming

1.3. Module on general business policies, basic organizational structure, and organizational behavior

The objective of this module is to introduce the key concepts about different types of organizations and how they function in the practical context of the business environment and how they formulate their strategic planning. The module emphasizes the role of the corporation in corporate governance and in promoting ethical behavior. It also examines human behavior in organizations at the individual and group levels including the effect of organization structure on behavior. On completion of this module an individual should be able to:

- describe the nature and purpose of the main types of organizations and distinguish between different forms of organizational structures
- explain the nature and purpose of the strategies, values and policies which operate in organizations
- outline how the formal corporate structure functions

- explain how the socio-cultural and political environment affects the way in which organizations conduct business
- explain the important role of the corporation in corporate governance and the check and balance among the interests of the various constituencies .
- explain the impact of changes in technology on organizations
- appreciate the unique challenges faced by small enterprises
- understand how not-for-profit organizations function differently.
- identify the principles and concepts in the theories and practices of strategic management
- assess the impact of environmental forces on organizational strategies and plans
- understand and apply organizational behavior concepts
- understand interpersonal and team interaction with implications to human resources issues.
- understand organizational analysis and problem solving
- identify the accounting areas which can be impacted by the concepts presented in this module and tie them to accounting functions

1.3.1 General business policies

1.3.2 Structure, function and objectives of different types of organizations

- (a) The nature and functioning of commercial organizations, including sole proprietorships, partnerships and companies (corporations)
- (b) Non-commercial organizations, including public sector organizations, clubs and societies
- (c) The key personnel and their roles, responsibilities and relationships in organizations and the ways in which these might be integrated
- (d) The ways in which organizations may be structured
- (e) The functions within organizations
- (f) The strategy, aims, objectives, values, policies and conflicts which organizations may have, and the ways in which these are developing, in relation to:
 - (i) Alternative theories of the enterprise
 - (ii) Innovation and change, quality and value for money
 - (iii) Human resources issues, such as development and working conditions
 - (iv) Clients and customers
- (g) The different forms which organizations may take in relation to the functions of :
 - (i) Administration
 - (ii) Finance
 - (iii) Personnel

1.3.3 The corporation and corporate governance

- (a) The aims and objectives of a corporation and the goals of the different interest groups involved
- (b) The relationship between shareholders, bondholders, bankers and directors; the potential for conflicts of interests; the effect of the agency theory on concepts of governance
- (c) The concept of goal congruence and how it can be achieved
- (d) The role of non-executive directors, administrators, management buy-outs and buy-ins, executive share schemes, etc. in corporate operations
- (e) The ways and means of promoting ethical behavior within the organization and in relation to the outside world.
- (f) The role of the chief financial officer (CFO), the audit committee, internal auditors, and external auditors.
- (g) Discussion of corporate governance case studies in the local scene as well as relevant cases from the international scene.

1.3.4 Organizations and their structural and political environment

- (a) Demographic structures and product and labor markets

- (b) Socio-economic groupings; the distribution of income and wealth
- (c) The influence of culture on organizational values, attitudes, behavior and performance
- (d) Social responsibility and organizations
- (e) Ethical behavior in the enterprise
- (f) The role of the state and its impact on organizations.
- (g) Political parties and pressure groups and their influence on government policy.

1.3.5 Strategic management and planning

- (a) Distinguish between functional and strategic level.
- (b) Identify opportunities and threats from the environment as they impact organizations.
 - (i) The processes by which firms choose, maintain or redirect their strategic positions within ever-changing external environments.
 - (ii) Integrate business functions and identify the organization's position in relation to the outside environment.
- (c) Competitive advantage: its meaning in different national and international markets and industries
- (d) Forecasting the future for nations, industries, organizations and the workforce for changes, developments and opportunities
- (e) Strategic management and planning: its purpose; the methods used; the effect of the external

- environment on planning; and understanding and managing risk
- (f) Illustration of the role of accounting in setting and implementing management strategy.

1.3.6 Organizations and technology: changes in technology and their implications for economic efficiency and growth, methods of production, types of products and organizational structure.

1.3.7 Special challenge faced by small enterprises

1.3.8 Not-for-profit organizations and governmental organizations

- (a) The different goals of these types of organizations in comparison with for-profit organizations
- (b) Evaluation of programs
- (c) Measuring effectiveness and efficiency

1.4. Module on management functions and practices and operations management

The objective of this module is to provide candidates with an understanding of the different functions, duties and responsibilities of enterprise executives and managers. It develops candidates' awareness that strategic decisions are the result of a trade-off between various competing options considered

by an organization's management. The module explores the decision-making process and the need to weigh the arguments, make choices and realize that, in most circumstances, there is not only one possible solution. The module introduces the accounting student to the decision making process in managing the production of goods and product planning, process planning, facility planning; and control of quantity, cost and quality with emphasis on inventory management, work methods, project management, productivity improvement. On completion of this module the individual should be able to:

- describe the nature of management and management styles
- explain the role of communications in organizations
- understand the importance of linking information systems development and management to business goals and needs
- projects evaluate ways in which change can be managed successfully and allocate resource sin an optimum way.
- understand the manager's role and responsibilities in relation to the working environment
- assess the importance of human resources development to organizations and identify methods of managing people effectively
- identify the accounting areas which can be impacted by the concepts presented in this module and tie them to accounting functions

1.4.1 The roles, functions and styles of management

- (a) The nature, purpose, scope and interrelations of functions carried out by management in relation to resources, costs, operations and performance, namely
 - (i) Setting objectives (long and short-term, strategic and operational, corporate and personal)
 - (ii) Planning to meet objectives
 - (iii) Implementing objectives
 - (iv) Monitoring, evaluating performance and checking performance against objectives and plans
- (b) The role of management in relation to an organization's human resources and the relationship of management style to organizational structure
- (c) The nature of general management and the changing nature of managerial work
- (d) Organizing group activities into distinct work units and establishing relationships between them
- (e) Defining the authority, duties and responsibilities of people and work units
- (f) Concepts of organizing
- (g) Effective communication in organizations, both written and oral
- (h) Forms, styles and types of communication in organizations

- (i) Negotiation techniques and skills development
- (j) Promoting new ideas to others to gain their support
- (k) Management integrity

1.4.2 The role of the accountant in the management team in providing information and assisting in the analysis, interpretation and forecasting of business operations

- (a) Seeking and clarifying information and views from others, including providing feedback to others
- (b) Isolating the key aspects of information and providing summaries for use by others
- (c) Presenting information clearly to others, both orally and in writing
- (d) Negotiating and agreeing with others
- (e) Promoting new ideas to others to gain their support
- (f) Giving and receiving constructive criticism to improve future performance
- (g) Advising others in one's areas of responsibility and expertise
- (h) Encouraging others to offer information, suggestions, etc
- (i) Ethical behavior among parties

1.4.3 Managing operation and services

- (a) Determining the work to be undertaken: time and resources needed and their costs; contingency planning

- (b) Planning resources allocation
 - (i) Setting work objectives
 - (ii) Designing and modifying methods of achieving work objectives
 - (iii) Optimizing the allocation of available resources
 - (iv) Formulating and evaluating work plans
 - (v) Reviews of previous plans and performance
 - (vi) The importance of time management.
 - (vii) Implications of resource allocation and work plan alternatives on costs, profitability

- (c) Monitoring and maintaining services
 - (i) Different concepts of quality
 - (ii) Methods for monitoring and evaluating the implementation of work plans
 - (iii) Methods of assessing, analyzing and interpreting information on service
 - (iv) Delivery and other non-financial targets, resource utilization and costs –
 - (v) Inventory control.

1.4.4 Human resources management

- (a) Cultural differences and compensation and performance evaluation
- (b) The purpose and forms of personnel specifications in the recruitment of personnel
- (c) Methods of identifying competencies and other attributes required
- (d) Specifying personnel requirements
- (e) Evaluating and determining the benefits and costs of new or additional personnel
- (f) Identifying and determining suitable methods of recruitment
- (g) Selection methods and their use
- (h) Methods of motivating and supporting personnel
- (i) Staff appraisals and the assessment of competence
- (j) Warning and dismissing personnel: legal and organizational policies and procedures; the role of internal and external specialists in the process
- (k) The role of employee groups in promoting the welfare of personnel
- (l) National legislation which affects recruitment, selection, employment and dismissal of personnel
- (m) The management of organizational and personal changes
- (n) Concepts and principles of human resources development

- (i) The role which individual and team development can play in growth and development
- (ii) The different concepts and models of competence
- (iii) Methods of encouraging and supporting individuals and teams to grow and develop (including issues such as stress management and time management).
- (iv) The effect of internal and external factors on personnel development

1.4.5 Management of the working environment

- (a) Organizational structure, forms, and culture.
- (b) Motivation, employment contract, diversity, negotiation, communication, leadership and teamwork.
- (c) Interrelationship of organizational elements in maintaining a functioning organization.
- (d) Monitoring, interpreting and applying best practices
- (e) National legislation which affects the working environment
- (f) The role and purpose of health, safety and security requirements, procedures and guidelines
- (g) Roles and responsibilities of persons for managing and improving the working environment

1.5. Module on marketing

The objective of this module is to introduce students to the nature of marketing, the fundamentals of marketing strategy, and marketing environment. The module explores global competition, ethical and moral marketing behaviors, the business environment under which marketing operates, and the role of technology in a changing world. It investigates the marketing of goods and services by commercial organizations as well as the marketing of ideas by not-for-profit firms. Upon completion of this module individuals should be able to:

- evaluate the strategic role of marketing
- explain the major distribution function of marketing
- understand buyer behavior, market segmentation, targeting, positioning and the role of the Internet in the practice of marketing
- understand integrated marketing communications through advertising, sales promotion, publicity, and public relations
- understand the role of pricing and pricing strategies employed in the successful marketing of goods and services.
- identify the accounting areas which are impacted by the concepts presented in this module and give examples.

1.5.1 Nature of marketing

- (a) The purpose and functions of marketing,
- (b) The fundamentals of marketing strategy, and the different roles which marketing plays in the economy,
- (c) The business environment under which marketing operates,
- (d) The ethical and moral marketing behaviors.
- (e) Analyzing market needs and identifying marketing opportunities and how to improve the services offered
- (f) Obtaining competitive advantages: market segmentation, targeting and positioning strategies
- (g) The marketing of goods, services and ideas by businesses as well as by not-for-profit firms.
- (h) Consumer Behavior: Decision-Making Processes and Socio-cultural Forces

1.5.2 The nature of distribution

- (a) Retailing and Wholesaling
- (b) Physical Distribution Management

1.5.3 Promotion and advertising

- (a) Advertising
- (b) Sales Promotion
- (c) Public Relations

1.5.4 Pricing

- (a) Introduction to Pricing Concepts
- (b) Pricing Strategies and Concepts

1.5.5 Special topics in marketing

- (a) Strategies for New Products and the Product Life Cycle (PLC)
- (b) The Marketing of High Quality Services
- (c) Integrated Marketing Communications

1.5.6 The impact of the global economy on marketing

- (a) Relationships between Transnational Corporations and developing countries.
- (b) The role of transnational corporations in economic development.
- (c) Relationships with host countries.
- (d) The Microenvironment in an Era of Global Competition
- (e) Global Information Systems and Marketing Research
- (f) The emerging role of the Internet and the role of technology in marketing
- (g) Transfer pricing revisited.
- (h) Unfair transfer pricing strategies and the incentives for these.
- (i) Effects of unfair transfer pricing strategies on the economies of developing countries.
- (j) Detecting unfair transfer pricing strategies

1.6. Module on international business

The objective of this module is to explore the role of global financing, investing and operating activities and their impact on business and trade. The module exposes students to the challenges and opportunities in doing business in a global environment. Upon completion of this module individuals should be able to:

- understand the global environment in which business operates
- outline the major financial decisions faced by managements in conducting international business
- comprehend the role of the multinational corporation, the challenges it faces and the power it commands
- assess the role of the global environment on small business and the challenges it faces and the opportunities it presents
- appreciate the impact of globalization on human resources

1.6.1 Organizations and their international environments

- (a) The importance of international trade
- (b) The globalization of markets
- (c) The development of multinational and transnational corporations

1.6.2 International business: competing in the global economy

- (a) International factors affecting business developments:
- (b) The role of transnational corporations in the world economy with particular emphasis on the role of financial markets in shaping management decisions of international firms:
 - (i) The ever emerging global economy,
 - (ii) National differences in economy and culture,
 - (iii) Cross-border trade and investment,
 - (iv) The global trading and monetary system,
 - (v) Foreign direct investment,
 - (vi) Regional economic integration,
 - (vii) The foreign exchange market.
- (c) International financial management decisions:
 - (i) Alternative methods of financing imports and exports
 - (ii) The workings of international money and capital markets and the opportunities that they offer to companies as a source of finance and as a repository for the investment of funds
 - (iii) The management of financial resources within a group of companies, including:

- payment between companies,
 - cash management,
 - transfer pricing,
 - judging the performance of companies within a group,
 - the financial control of a group of companies
- (iv) The appraisal of international capital investments, applying the appropriate techniques, and the consideration of the major issues in the decision-making process, including:
- strategic objectives,
 - the principle of home country vs. host country returns,
 - the form of foreign investments including use of branches vs. subsidiaries,
 - the different methods of financing foreign investments,
 - the effect of taxation on foreign investment decisions,
 - repatriation of sales amounts, earnings and charges to foreign operating companies,
 - political risk analysis.

1.6.3 The international firm

- (a) Dimensions of culture

- (b) Organizational structure
- (c) Management and the structure of multinational firms

1.6.4 International HRM issues.

- (a) Globalization and human resource strategy
- (b) Dealing with intercultural differences
- (c) Selecting employees for foreign assignments
- (d) Training and developing expatriate employees
- (e) Evaluation and compensation of employees in international assignments

2. Information Technology

2.1 Module on information technology (IT)

The objective of this module is to ensure that candidates appreciate the contribution of information systems to meet the goals and needs of business and to understand procedures for the development, introduction and use of computer-based systems. The subject matter should be taught from the perspective of their usefulness and application to business situations; the technology should not be seen as an end in itself. The module starts with basic survey materials pertinent to equip the student to have a consumer's understanding of IT. The study of information technology should be integrated as far as possible in the study of subjects in the other modules, and not as a separate stand-alone, self-contained

technical skills course. The subject matter described in this module represents the scope of knowledge, which should be learned. On completion of this module the individual should be able to:

- describe different types of information system, with particular reference to financial systems
- understand what IT is about, i.e., that is, what the IT people do
- understand what the points of interaction are between the accountant and the IT functional areas i.e., where the IT specialists need the help of the accountants and conversely where they can help the accountants
- understand working with large-scale systems.
- understand their role in the decision-making process and their relationship to the organization
- understand the internal controls in data processing systems
- describe and apply the main tools and techniques of systems analysis, design and development
- evaluate the performance of information systems
- describe systems for the security of data and applications and cost implications, not just descriptions
- describe the tools that are available to assist in efficient project management.
- discuss the procedures to enable systems maintenance to be carried out in an accurate and timely manner
- understand upgrade and replacement cycles

- understand the problems of managing existing resources such as desktop inventory and how to handle maintenance cycles for all equipment in the organization
- understand the importance of electronic commerce in the current business environment and understand how it works, what it costs, and what changes it causes in the firm
- understand the implications for changing the equipment configuration, software configuration, etc.
- Expose students to Knowledge Management – particularly knowledge management for accounting knowledge

2.1.1 IT concepts for business systems - Survey of IT pertaining to accounting functions

- (a) General system concepts
 - (i) Systems theory, system objectives and types of systems
 - (ii) System architectures
 - (iii) Control and feedback in systems
 - (iv) The nature, types and attributes of information
 - (v) The role of information within business
- (b) Management's use of information – General overview
 - (i) Decision theory
 - (ii) Human information processing

- (iii) Transaction processing in typical business applications
 - (iv) The communication of information
 - (v) Financial analysis, decision support, executive information systems, and business intelligence
 - (vi) General ledger, budgeting and information systems.
- (c) IT infrastructure and rules as they pertain to accounting functions
- (i) Hardware
 - Capabilities
 - PC
 - Mid-range& mainframes
 - Wireless
 - Cost/Replacement cycles
 - (ii) Software
 - Applications/operating systems capabilities
 - Application software strategy
 - Integrated systems
 - Databases
 - Nature of the IT industry& IS contracts
 - Software (creation & maintenance.)
 - Cost/replacement cycles
 - (iii) Telecom
 - Cost

- Capabilities
 - Bandwidth
 - Wireless
 - Providers
 - Regulatory environment
 - (iv) Security
 - (v) Privacy
- (d) Accountants functions with respect to IT
- (i) Specify types and characteristics of
 - End user hardware
 - Application software
 - Telecommunications infrastructure
 - (ii) Interact with IS
 - Group level
 - Individual level
 - Software specification
 - Software acceptance testing
 - Software maintenance
 - (iii) Interaction of accountants with IT technical staff
 - (iv) Accountant's role on computer/IT/IS committees
 - (v) In strategic decisions about IT such as:
 - Resource allocations
 - Hardware to be obtained

- Applications to be available
 - Infrastructure to be put in place (telecom, intranets, extranets)
 - Make vs. buy decisions on hardware, software
 - Outsourcing vs. In-sourcing
 - Automating business functions
 - Business Process Reengineering
 - Adoption of new technologies
 - Strategic Use of IT
- Outsourcing
 - Strategic use of IT

(e) Data organization and access methods

- (i) Data structures and life organizations
- (ii) Access methods and the maintenance
- (iii) Types of data files
- (iv) Data base management systems
- (v) Document management

(f) Networks and electronic data transfer

- (i) Network components, configurations, and designs
- (ii) Internet, internet and extranet applications

- (iii) Data communication and transmission devices/software
 - (iv) Message and document communication
 - (v) Operation management and control
- (g) Transaction processing in typical business applications
- (i) General application processing phases
 - (ii) Processing models
 - (iii) How different classifications of transactions are processed (e.g. purchases, sales, etc)
 - (iv) Production planning and scheduling, including ERP, computer-aided design CAD and CAM

2.1.2 Internal Control in computer-based business systems

- (a) Control objectives
 - (i) Risks and exposure in computer-based information systems
 - (ii) The effect of the computer on processing controls
 - (iii) The effect of IT on organizations and control
 - (iv) Responsibility for controls
 - (v) Effectiveness and efficiency of operations
 - (vi) Reliability of financial reporting
 - (vii) Compliance with applicable laws and regulations
 - (viii) Cost effectiveness of control procedures

- (b) Control framework
- (c) The control environment
 - (i) Management philosophies and operating styles, organization plans and structures, communication methods and control methods and their effects on system development
 - (ii) Control over system selection, acquisition and development
 - (iii) Control over system implementation
 - (iv) Control over system and program changes
- (d) Risk assessment
 - (i) Risk exposures
 - (ii) Probability and consequences of loss
 - (iii) Preventive, detective and corrective strategies
- (e) Control activities
 - (i) The function of accounting systems
 - (ii) Administrative and accounting control procedures
 - (iii) Control design
 - (iv) Continuity of processing, disaster recovery planning and control
 - (v) Information system processing and operations from a control point of view

- (f) Monitoring compliance with control – the role of management users, internal auditors and external auditors

2.1.3 The management of IT adoption, implementation and use

- (a) Strategic consideration in IT development
 - (i) Planning of information systems based on business success factors and criteria
 - (ii) Components of long-range plans
 - (iii) Integration with business objectives and success factors
 - (iv) Participation in strategic planning
- (b) Administrative Issues
 - (i) Job functions, organization and reporting relationships of the IT department
 - (ii) Recruiting and developing information systems human resources (IT service in-house vs. outsourced packaged software).
- (c) Financial control over IT –budgeting and cost control
 - Operational issues
 - (i) Developing operational priorities
 - (ii) Management of computer operations
 - (iii) Management of inter-organizational computing
- (f) Management of system acquisition, development, and implementation

- (i) Development acquisition alternatives
 - (ii) Standards and controls applicable to IT development projects
-
- (g) The management of system maintenance and change - standards and control
 - (h) The management of end-user computing – the role of information centres
 - (i) Charge-back schemes

2.1.4 Managing the Security of Information

- (a) Control over data integrity, privacy, and security
- (b) Importance of information security
- (c) Principles of information security
- (d) Best approaches to implementing information security
- (e) Trade-off between cost of security and amount of security

2.1.5 Electronic Commerce

- (a) The nature of electronic commerce
- (b) Intra-company applications
- (c) The extranet and its applications for managing supply chains with suppliers, vendors, and contractors
- (d) The Internet and the worldwide web
- (e) The marketing of products and services
- (f) External customers transactions, payments and transfers

- (g) On-line banking (*as it affects the firm's treasury*).
- (h) Financial electronic data interchange (FDI)
- (i) Security matters related to electronic commerce

2.1.6 Accounting, finance and related knowledge

This accounting, finance and related knowledge section of the curriculum is made up of 10 required core (basic) modules and seven elective (advanced) modules. Each institution adopting the MC should cover the core modules. The institution's curriculum planning process should set additional requirements (minimum of three modules) from among the seven elective (advanced) modules. The selection of electives should be consistent with 1) the mission and goals of the institution, 2) the environment in which it operates, and 3) the needs of students to specialize in one of the accounting specializations.

3. Core (Basic) Accounting, Auditing, Taxation, and Accounting-Related Knowledge

3.1 Module on basic accounting

The objective of this module is to equip candidates with the basic understanding of the principles and concepts of accounting as well as their applicability

and relevance in the national context and with the ability to apply these principles and concepts in the preparation of financial and related information to meet internal and external obligations. On completion of this module individuals should be able to:

- outline the role and principles of financial accounting and reporting
- identify, measure, and communicate economic and financial events that are subject to accounting treatment.
- prepare financial statements for both incorporated and non-incorporated enterprises
- discuss the accounting treatment of long-life assets, short-life (current) assets, liabilities, goodwill, research and development costs, contingencies, and events after the date of the latest balance sheet (statement of financial position)
- understand and apply relevant International Accounting Standards applicable to the topics in the module
- communicate the results of the financial accounting process through properly prepared financial statements.
- interpret and use financial information for business decision-making
- appreciate the importance of professional judgment and ethics in making accounting and financial reporting decisions.

3.1.1 Introduction to accounting

- (a) Define and explain accounting identifying its functions, scope, and objectives.
- (b) Differentiate among the different branches of accounting (financial, managerial, etc.)
- (c) The classical notion of stewardship
- (d) Double entry bookkeeping
- (e) The Florentine vs. the Venetian approach to reporting
- (f) Savory and the Napoleonic Commercial Code
- (g) The industrial revolution and the share-issuing company
- (h) The arrival of income taxation and the conflict with financial accounting.
- (i) Schmalenbach and the charts of accounts
- (j) The rise of the Group of Companies and the need for consolidated account
- (k) Accounting variations among countries
 - (i) Why practices differ from one country to another even though the same set of basic principles is followed
 - (ii) The linkage of tax laws and accounting principles requirements for enterprises in certain countries
 - (iii) Differences in the degree of development of the capital markets in countries and their effect on the development and use of generally accepted international principles of accounting

- (l) Internationalization of markets and reporting

3.1.2 The nature of the accounting profession

- (a) Italian initiatives in the sixteenth century
- (b) Origins of the modern profession in the early nineteenth century
- (c) Creation of the Chartered Institutes in Scotland and England
- (d) The development of professional bodies in the English-speaking world
- (e) Developments in Germany and France in the twentieth century
- (f) The international dimension and the “big four” international accountancy firms

3.1.3 Basic professional values and ethics

- (a) Reputation
- (b) Integrity and due care
- (c) Competence
- (d) Objectivity
- (e) Client relations and confidentiality
- (f) Reporting breaches of conduct
- (g) Unlawful activities
- (h) Fees and remuneration
- (i) Publicity and advertising
- (j) Disciplinary procedures

3.1.4 Standard-setting and regulation in accounting practice

- (a) Early sources of regulation
 - (i) Public sector regulation of accounting practice
 - (ii) National securities commissions and their role in accounting regulations
 - (iii) Private sector standard-setting for accounting practice

- (b) Harmonization of accounting practice Internationally
 - (i) The International Accounting Standards Board (IASB) and its IFRS
 - (ii) The United Nations Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR)

3.1.5 National concepts and principles relating to the preparation and presentation of financial Statements

- (a) The nature, principles and scope of accounting
- (b) The nature, principles and objectives of financial and related records of an organization
- (c) The users of financial and related information and their varying needs

- (d) The assumptions underlying general-purpose financial statements
- (e) The qualitative characteristics of financial statements
- (f) The elements of financial statements
- (g) Criteria for the recognition of the elements of financial statements
- (h) Measurement of the elements of financial statements
- (i) The concept of capital and capital maintenance
- (j) The nature, role and significance of accounting theories and principles
- (k) Principles of conceptual frameworks of accounting
- (l) Generally accepted accounting standards
- (m) The concept and role of the true and fair presentation of financial statements

3.1.6 Identifying, measuring and communicating economic and financial transactions applying IAS and IFRS

- (a) Double-entry bookkeeping and accounting systems.
- (b) Introduction to manual and electronic bookkeeping systems
- (c) The classification of expenditures between capital and revenue transactions
- (d) The accounting treatment of disclosures of accounting policies
- (e) The accounting treatment of current assets such as cash and deposits, accounts receivable and

- prepayments, bad and doubtful accounts, and inventories or stocks
- (f) The accounting treatment of long life (term) assets such as tangible (fixed) assets and intangible assets (including goodwill and research and development costs), and the depreciation and amortization of such long life assets
- (g) Valuation and reporting of investments in debt and equity securities
- (h) The accounting treatment of current and long-term liabilities and provisions
- (i) The nature, purpose and accounting treatment of shareholders' equity and reserves
- (j) Accounting for leases
- (k) The presentation of financial statements
- (l) Post-balance-sheet events and contingencies
- (m) Confirming and correcting mechanisms in book-keeping and accounting systems, such as control accounts, bank reconciliation and suspense accounts, and the correction of recording errors

3.1.7 The preparation and presentation of financial statements for business enterprises (under conditions of stable prices)

- (a) Income statements
- (b) Balance sheets
- (c) Cash flow statements
- (d) Value-added statements
- (e) Statement on Changes in Equity

3.1.8 Basic interpretation and use of financial statements

- (a) Contrasting the concepts of funds flow and cash flow
- (b) The computation, interpretation, and limitations of significant accounting ratios for financial statement analysis purposes
- (c) Appraising and communicating the financial position and prospects of a business based on given and prepared statements and ratios
- (d) Appraising the validity of available information for user purposes

3.2 Module on financial accounting

The objective of this module is to ensure that candidates have developed a thorough knowledge and understanding of accounting principles and concepts and can apply this grounding to the situations that they will typically encounter in practical work situations. On completion of this module individuals should be able to:

- appraise theoretical and regulatory national accounting frameworks and international accounting standards
- prepare income statement and statement of cash flows, income measurement, balance sheet, financial disclosures, time value of money concepts, current assets (cash and receivables, inventory), operational assets, investments, current liabilities, contingencies,

bonds, notes, leases, accounting for income taxes, pensions, employee benefit plans, shareholders' equity, accounting changes, earnings per share.

- analyze and interpret financial and related information and produce reports to meet the needs of internal and external users
- develop a professional in-depth understanding of underlying accounting concepts

3.2.1 The theoretical accounting framework – applying IAS and IFRS

- (a) The objectives of financial statements
- (b) Qualitative characteristics of financial information.
- (c) Users of financial statements and their information requirements
- (d) Accounting conventions
- (e) The interpretation and application of theories of accounting in relation to
 - (i) The recognition and measurement of income
 - (ii) Capital maintenance
 - (iii) The valuation of assets and liabilities
- (f) The accounting recognition of assets, liabilities and shareholders' equity transactions
- (g) Principles of accounting for revenues and costs

3.2.2 The preparation of the different types of financial statements and other special accounting issues – applying IAS and IFRS

- (a) The conversion of an unincorporated enterprise into a corporation
- (b) The concepts of pre-incorporation profits, distributable profits and the purchase of an enterprise's own shares
- (c) Accounting for joint ventures and associated enterprises
- (d) Interim (i.e. other than year-end) financial reporting by enterprises
- (e) Fair value accounting
- (f) Accounting for financial instruments, such as derivatives and other hedging instruments
- (g) Accounting for environmental cost and liabilities
- (h) Accounting for governmental assistance
- (i) The role and function of the special (national/regional) standard setting organizations

3.2.3 The preparation of financial statements for various types of organizational entities

- (a) The preparation of accounts from incomplete information and records
- (b) Partnership accounting, including accounting for the admission of partners, changes in capital and profit and loss-sharing ratios, and the retirement, dissolution and goodwill adjustments for partnership interests

- (c) Accounting for proprietorships and other unincorporated enterprises
- (d) Accounting for incorporated enterprises, including the preparation of financial and other statements for internal and external purposes
- (e) Fundamentals of accounting for not-for-profit organizations
- (f) Introduction to accounting for foreign subsidiaries and branches, and accounting for foreign currencies

3.2.4 Advanced concepts for analyzing and appraising financial and related information

- (a) Interpreting and analyzing financial statements for indications of business performance
- (b) Use of computers for financial analysis
- (c) Assessing information weaknesses in financial statements
- (d) Business valuation

3.2.5 The communication of information to users: the preparation of reports to meet the needs of internal and external users, supported by appropriate accounts and financial statements, which include necessary information and explanations

- (a) The results of operations and the state of affairs
- (b) Projected results
- (c) Accounting policies and practices used

- (d) The main assumption on which the reports are based
- (e) Significant departures from IAS and IFRS and national standards, and assumptions and policies
- (f) Graphic presentation of financial data for users, including the use of computer-generated graphics

3.3 Module on advanced financial accounting

The objective of this module is to ensure that candidates can exercise judgment and techniques in accounting encountered by professional accountants, and can evaluate and react to current developments or new accounting practices. Institutions can add to this module any legal and/or unique financial reporting requirements applicable to this environment. On completion of this module the individual should be able to:

- interpret, apply and appraise critically emerging professional accounting and reporting issues and exposure drafts.
- understand, apply, and critically evaluate the theoretical and practical issues involved in the identification, measurement and communication of tangible and intangible non-monetary assets, monetary assets and liabilities.
- analyze and interpret financial statements and other related information.
- prepare reports of groups of companies, consolidated financial statements

- develop a critical appreciation of the functions of financial accounting and reporting and further strengthen practical and analytical accounting skills
- understand the theory underlying financial accounting practices and apply this theory to the study of accounting regulations.
- critically evaluate and apply relevant accounting standards through a study of conventional and alternative accounting practices.

3.3.1 The Professional activities of accountants – applying IAS and IFRS

- (a) Critically appraising, evaluating proposed changes and promoting changes in
 - (i) Accounting theories and principles,
 - (ii) Concepts
 - (iii) IFRSs, IASs, Exposure Drafts of IASs and other IASB publications
- (b) Monitoring and evaluating
 - (i) International issues and case law
 - (ii) Ethical issues

3.3.2 Group (consolidated) accounts

- (a) The concept of group accounts
- (b) General principles for the preparation of group accounts
- (c) Inter-company eliminations in the preparation of group accounts

- (d) Translation methods for preparing group accounts of entities whose individual accounts are expressed in more than one currency
- (e) Other methods of accounting for groups of enterprises
- (f) The equity method of accounting,
- (g) The proportional consolidation method
- (h) Financial instruments, such as derivatives and other hedging instruments
- (i) The use of computers for preparing combining and consolidating groups of accounts

3.3.3 Assessing informational weaknesses and limitations of financial statements and analyses

3.3.4 Special topics dealing with local legal financial reporting requirements or issues unique to this environment

3.4 Module on management accounting – basic concepts

The objective of this module is to generate accounting information capable of facilitating managerial decisions at all levels in their efforts to efficiently and effectively allocate the organization's scarce economic, human, and financial resources. This objective is to be accomplished through a thorough understanding of how the information generated is being used. Therefore, emphasis on the content and delivery of management and cost accounting methods and

techniques are taught within the context of the decision-making processes. On completion of this module the individual should be able to:

- discuss the role of cost and management accounting and quantitative analysis within the organization.
- analyze and solve different types of managerial accounting decision-making problems by applying various management accounting techniques and methods
- use various classifications to analyze costs within the organization.
- describe and apply the principles relating to the costing of the different resource inputs into a business.
- demonstrate output costing methods appropriate to a variety of different businesses.
- illustrate and evaluate absorption, marginal costing, activity-based costing methods and other management cost accounting methods and techniques.
- describe, illustrate and comment on the planning and control uses of standard costing, budgeting and variance analysis
- describe, illustrate, and comment on the planning and control uses of standard costing, budgeting, and variance analysis

3.4.1 Background information

- (a) Importance of knowledge of the business processes and their technological implications
- (b) The role of quantitative techniques in problem-solving situations
- (c) The value of qualitative and quantitative information in decision-making
- (d) The interpretation of operating results and evaluation of the impact of optimum decisions
- (e) The benefit of computer software (e.g. spreadsheets and statistics packages) in handling numerical information
- (f) The importance of effective communications to users of information

3.4.2 The cost and management accounting framework

- (a) Cost and management accounting in comparison with financial accounting: their purposes, the role of cost accounting as part of a management information system, and the need for both financial as well as non-financial information
- (b) Cost classification concepts and terminology, such as:
 - (i) Direct and indirect costs,
 - (ii) Fixed and variable costs,
 - (iii) Period and product costs,
 - (iv) Controllable and uncontrollable costs,
 - (v) Avoidable and unavoidable costs,

- (vi) “Sunk” costs,
- (vii) Budgeted, standard and actual costs and their comparisons and analyses
- (c) The use of linear, curvilinear and step functions and how their calculations are used to analyze cost behavior
- (d) The concepts of cost units, cost centers and profit centers
- (e) describe, illustrate and comment on the planning and control uses of standard costing, budgeting and variance analysis
- (f) The difference between absorption and marginal costing systems

3.4.3 Cost determination: the costing of resource inputs

- (a) Materials
 - (i) Accounting for stock (inventory) movements
 - (ii) Determination of optimum purchase quantities
 - (iii) Material pricing issues
 - (iv) Identification of accounting for stock losses
- (b) Labor
 - (i) The difference between direct and indirect labor
 - (ii) Types of labor remuneration methods

- (iii) Labor efficiency calculations and interpretations
 - (iv) Recording labor costs
 - (v) Calculation and interpretation of labor turnover rates
- (c) Overheads
- (i) Overhead cost analyses
 - (ii) The apportionment and absorption of overhead costs, including reciprocal service situations
 - (iii) Accounting for the over- and under-absorption of costs

3.4.4 Costing methods: the costing of resource outputs

- (a) Job order, batch and contract costing methods
- (i) Characteristics of each method
 - (ii) Accounting for direct and indirect costs, including the treatment of waste, scrap and rectification costs,
 - (iii) Calculation of the profit on partially completed contracts
- (b) The process costing method:
- (i) Characteristics of the process costing method,

- (ii) Identification and use of appropriate cost units,
 - (iii) Valuation of process transfers and work-in-process using equivalent units of production and based on FIFO and average costing methods,
 - (iv) Accounting for normal and abnormal losses and gains, joint and by-products
- (c) Operation or service costing
- (i) Scope of operation or service costing,
 - (ii) Identification of appropriate cost units,
 - (iii) Considerations relating to the collection, classification and ascertainment of costs
- (d) Standard costing

3.4.5 The pricing of goods and services

- (a) Target and minimum pricing.
- (b) Price /demand relationships,
- (c) The pricing of special orders and short-life products,
- (d) Transfer pricing between divisions in a group,
- (e) Pricing in service industries,
- (f) Pricing internal services

3.4.6 Costing systems: marginal contrasted with absorption costing

- (a) The concept of profit contribution

- (b) The difference between marginal and absorption costing
- (c) Marginal cost accounting: process cost accounting transactions in a marginal costing system
- (d) Cost-volume-profit (CVP) analysis: understanding the concepts of break-even and margin of safety

3.4.7 Cost and management accounting methods

- (a) Cost control (as distinguished from cost determination); control over waste, scrap, spoilage and defective items
- (b) Determining and allocating or apportioning the costs of activities and outputs through the use of appropriate concepts, methods and techniques for:
 - (i) Absorption costing,
 - (ii) Marginal costing,
 - (iii) Opportunity costing
- (c) Activity-based costing; use of cost drivers and activities
- (d) Alternative stock (inventory) management systems and models including total quality management (TQM), “just in time” (JIT), economic order quantities (EOQ), etc.
- (e) Consideration and application of information required in relation to

- (i) The costing of products and services
 - (ii) Preparing plans
 - (iii) Monitoring and controlling performance and
 - (iv) Decision-making needs
- (f) Relevance, costs, and the decision process
- (g) Cost reduction: techniques such as work-study, time and motion studies and value analysis

3.4.8 Budget as a tool for decision-making

- (a) Master budgets
- (b) Flexible budgets and variances analysis

3.4.9 Information for budgeting, planning and control purposes

- (a) Objectives and concepts of budgetary systems
 - (i) Budgeting as a multi-purpose activity,
 - (ii) Budgeting and behavioral influences,
 - (iii) Quantitative aids in budgeting: learning curve theory and application; limiting factors and linear programming,
 - (iv) Activity-based budgeting,
 - (v) Control theory and budgeting,
 - (vi) Uncertainty and budgeting,
 - (vii) Identification of relevance, strengths and weaknesses of budgeting and budgetary control

- (b) Types of budgetary systems: fixed and flexible budgets, zero-based budgets, and incremental, periodic and continuous budgeting
- (c) Developing and implementing budgeting systems: functional and subsidiary budgets and master budgets, including cash budgeting
- (d) Monitoring and controlling performance; the calculation of variances; the determination of the causes of variances
- (e) Short-term vs. long-term budgets
- (f) Quantitative aids in budgeting: least squares regression; scatter diagram with correlation; forecasting with regression; time series and seasonality concepts for the analysis of time-related data

3.4.10 Standard costing

- (a) The uses and limitations of standard costing methods
- (b) The determination of standards
- (c) Identification and calculation of variances: sales variances (including quantity and mix); cost variances (including mix and yield); absorption and marginal approaches
- (d) Identification of significant variances and their interrelationship
- (e) The uses of planning and operational variances
- (f) Trends, materiality and controllability of variances
- (g) Uncertainty and variance analysis

- (h) Identification of relevance, strengths and weaknesses of standard costing and variance analysis for performance and control

3.5 Module on taxation

The objective of this module is to differentiate between tax accounting and financial accounting and to introduce the mechanics of major taxes, in particular those of corporate tax, personal taxes and value added tax, if applicable particularly those that are likely to be encountered during the initial phase of a candidate's tax experience in professional practice and to equip candidates to solve unstructured problems in the future. On completion of this module the individual should be able to:

- distinguish between financial accounting and tax accounting
- discuss the operation of the national taxation system
- compute the income tax liabilities arising from individual and unincorporated businesses
- compute tax liabilities for companies
- display an awareness of the impact of all major taxes on the transactions of individuals, partnerships and corporations
- apply that knowledge to practical situations involving computation, explanation, discussion and advice

- appreciate the importance of taxation in personal and corporate financial planning and decision-making
- demonstrate an understanding of the national tax regulations associated with the provision of suitable investment advice to individuals
- identify opportunities to minimize potential tax liabilities by making full use of available options, relief and other forms of available allowances

3.5.1 Overview of the national tax system

- (a) The philosophy and genesis of taxation and relationship between government stewardship of national resources and taxation.
- (b) Structure and procedures of the national, regional and local taxation authority
- (c) Duties and powers of taxation authorities and the nation's legal system
- (d) Assessments, due dates, interest on overdue amounts, and refunds of amounts paid
- (e) Sources of tax information: statutes, case laws, regulations and other sources
- (f) Resolution of tax disputes

3.5.2 Taxation of incorporated businesses

- (a) The principles and scope of corporation taxation laws
- (b) Calculating tax liabilities
- (c) Special regulations applicable to groups of companies

- (d) Minimizing and deferring tax liabilities
- (e) Purchases and sales of a company's own shares
- (f) Tax effects of the acquisition and sales of companies owned

3.5.3 Capital gains tax

3.5.4 Local direct taxes, including real estate and other property taxes

3.5.5 Tax planning and the application of appropriate tax planning measures

3.5.6 The use of computers for tax planning and for the preparation of tax returns

3.5.7 Ethical considerations – tax avoidance and the minimization of tax liabilities vs. tax evasion

3.5.8 Other taxes such as excise taxes and road taxes –C/E

3.5.9 National and culturally-determined insurance schemes – C/E

3.5.10 Social security schemes –C/E

3.5.11 Value-added tax schemes –C/E

3.5.12 Other culturally-determined taxes –C/E

3.6 Module on accounting information systems (AIS)

The objective of this module is to adopt an up-to-date perspective of accounting information systems incorporating a version of an efficient real time accounting systems. On completion of this module the individual should be able to:

- develop an understanding of organisations - their activities, processes, and the information needs of organisation stakeholders.
- develop awareness of the processes and disciplines associated with the design and control of accounting information systems.
- develop awareness and an understanding of information risk assessment and control procedures.
- develop awareness of the resources available to build a real time Accounting Information Systems.
- develop the ability to collate and present information in a timely and effective manner.
- demonstrate an understanding of various accounting and business processes in an information systems context.
- discuss and apply the principles of business system design.

3.6.1 Introduction to accounting information systems

- (a) Review of manual accounting systems
- (b) Traditional AIS

- (c) Data concepts
- (d) Business system design

3.6.2 Development standards and practices for accounting information systems

- (a) The role of information in organization design and behaviour
 - (i) Databases and database management systems
 - (ii) System development life cycle
 - (iii) Risks: economics, technical, operational and behavioral
 - (iv) Controls
- (b) System analysis and design techniques
 - (i) Information requirements elicitation
 - (ii) Documentation of analysis and requirements
 - (iii) System design
- (c) System acquisition, development life cycle phases, tasks and practices, and maintaining control over system development processes
 - (i) Investigation and feasibility studies
 - (ii) Requirements analysis and initial design
 - (iii) Detailed design specification and documentation
 - (iv) Hardware evaluation and acquisition and development

- (v) Software evaluation and acquisition and development
- (vi) Selection of an internet service provider
- (vii) Hardware contracts and software licenses
- (viii) System installation and implementation
- (ix) Testing (system verification)
- (x) User procedures and training
- (xi) Design of user and operator control procedures
- (xii) Testing (system validation)
- (xiii) System conversion and start-up
- (xiv) Post-implementation review
- (xv) Maintenance of hardware and software
- (xvi) System documentation and operation manuals

3.6.3 Accounting system design issues

- (a) System acquisition
- (b) Basic flowcharting techniques/systems
- (c) File processing:
- (d) Master files
- (e) Transaction files
- (f) Periodic reporting.
- (g) Problems with the traditional approach

3.6.4 Internal and systems controls

- (a) Frameworks for internal control
- (b) Specific internal control techniques
- (c) Control issues.

3.6.5 The database warehouse approach:

- (a) Introduction to databases
- (b) Fundamentals/entity relationships and data flow diagrams
- (c) Access database fundamentals
- (d) Random on-line access
- (e) Shared data (use of common data structures) and system flexibility
- (f) Efficient and reliable storage
- (g) The RDBMS (Relational Data Base Management System) approach

3.6.6 The systems development life cycle model.

- (a) System design methods and tools
- (b) Computer Aided Systems Engineering

3.6.7 Commercial software

3.6.8 Change management – behavioural issues

3.7 Module on business law

The objective of this module is to survey the legal and ethical environment of business. It provides an awareness of the nation's overall legal framework within which a professional accountant operates. This includes civil law, labor law, criminal law (as it relates to business activities), tort law, contracts, warranty law, product liability, government regulation, property, as

well as ethics and social responsibility. On completion of this module individuals should be able to:

- identify the main sources of law in the nation
- explain how laws are administered and how legal rules emerge in the legal system
- describe the various statutes which affect the professional accountant's work
- explain the general principles of the nation's law on contracts
- identify the major features of contracts for the sale of goods
- discuss the major legislative and common or civil law principles which govern employment relationships
- appreciate the formation of a company and distinguish between various types of companies
- describe the financing of a company, including both share and loan capital
- explain the management and administration of a company with respect to directors, company officers, auditors and company meetings.
- identify the important external regulatory bodies in the country which directly relate to company operations

3.7.1 General legal concepts of enforceable rights and obligations

3.7.2 Types of laws

- (a) Constitutional laws
- (b) Administrative laws and regulations
- (c) Criminal laws
- (d) Civil laws
- (e) Fiscal laws
- (f) Mercantile (commercial laws) including laws of credit
- (g) Insolvency and bankruptcy laws

3.7.3 The national legal system

- (a) The system of courts and the administration of justice
- (b) Case laws and/or legislation and regulations affecting enterprises
- (c) Precedents and statutory interpretations
- (d) Disputes and the use of experts

3.7.4 The nature, purpose, scope and key principles of national legislation, directives and case law

3.7.5 General principles of the law of contracts

- (a) Formation of a contract
- (b) Contract contents and terms, including exclusion clauses
- (c) Discharge of a contract

- (d) Remedies for failure to perform contract terms

3.7.6 Contracts for the sale of goods

- (a) Implied and specified terms
- (b) Transfer of the possession of property
- (c) Performance
- (d) Remedies

3.7.7 Employment contracts

- (a) Contracts of service and for services
- (b) Unfair and wrongful dismissal
- (c) Redundancies
- (d) Remedies of employees

3.7.8 The nature of a limited liability company

- (a) The difference between a limited liability company and a partnership
- (b) The advantages and consequences of forming a limited liability company

3.7.9 Company law

- (a) The formation of a company and the nature of its constitution
- (b) The formalities and the role of the Government's Registrar of Companies
- (c) The registration of shares, directors and directors' share holdings

- (d) The contractual capacity of a company
- (e) Statutory books, records and returns required for a company

3.7.10 Capital and the financing of companies

- (a) Share capital
 - (i) The issuance and transfer of shares,
 - (ii) Purchase and redemption of shares,
 - (iii) Dividends
 - (iv) Charges against the capital of a company
- (b) Loan capital
 - (i) Borrowing powers
 - (ii) Types of debentures and their creation,
 - (iii) Company charges for loan capital,
 - (iv) Registration of loans,
 - (v) Remedies of loan creditors

3.7.11 Other legal Issues

- (a) Product liability
- (b) Intellectual property
- (c) Third party rights
- (d) Personal property

3.7.12 Business ethics

3.8 Module on assurance and auditing fundamentals

The objective of this module is to provide candidates with a basic understanding of the legal and

professional framework within which an audit and assurance take place; an awareness of current developments in the auditing profession, and the nature and objectives of an audit, general auditing practice and other assurance services. On completion of this module individuals should be able to:

- demonstrate an understanding of the legal and professional environment within which the organization operates
- explain the nature, purpose and scope of an audit of financial statements.
- consider compliance with national laws and regulations in an audit
- appraise theoretical and regulatory national auditing frameworks and international auditing standards
- consider the ethical nature of an audit and the role of the professional auditor in today's business environment.
- Appreciate the concepts of corporate governance and the role of internal and external auditors.
- demonstrate knowledge of the ~~describe~~ audit procedures undertaken in the planning of an audit
- discuss the nature of internal controls, the procedures required to evaluate control risk and the use of tests of control
- show understanding of the audit process and the nature of audit evidence and explain the

methods for collecting and evaluating audit evidence and present information

- demonstrate ability to apply audit techniques
- understand other basic phases in performing audits including effectively selection and presentation of information and audit reports.
- demonstrate knowledge of audit concepts within both manual and computerized environments
- explain the nature, scope, function and objectives of internal auditing.
- Demonstrate the relationship and the roles of internal auditing, internal control and external auditing.

3.8.1 The nature, purpose and scope of an audit

- (a) The historical development of auditing
- (b) The ethical base of auditing
- (c) The notion of accountability, stewardship and agency
- (d) The social concept of an audit and its changing role

3.8.2 The regulatory framework of auditing and international standards on auditing

- (a) Auditing standards: their nature, purpose, scope and development
- (b) National bodies that set auditing standards and guidelines – their role and responsibilities
- (c) National legislation that affects auditors – the role of government in relation to auditors and the

- auditors' responsibility to consider national laws and regulations in an audit of financial statements
- (d) National supervision and monitoring of auditors
 - (e) The role of the International Federation of Accountants (IFAC)
 - (f) International Standards on Auditing (ISAs): their nature, purpose, scope and development
 - (g) The conceptual framework of ISAs
 - (h) The relationship between ISAs and national standards on auditing
 - (i) The role of parties in relation to auditing and corporate governance issues, including the regulatory and enforcement authority, management, internal auditors and the audit committee of the company's board of directors

3.8.3 The fundamental principles and concepts of auditing

- (a) Appointment of auditors
- (b) Management's role and responsibilities in an audit and the audit engagement letter
- (c) Auditor independence, objectivity and integrity
- (d) Confidentiality
- (e) Audit evidence and documentation
- (f) Due care, skill and competence
- (g) Audit risk
- (h) Materiality and judgment
- (i) Expression of an audit opinion
- (j) Audit reporting as a communication medium

- (k) Audit planning and supervision
- (l) Quality control and review

3.8.4 The framework of auditing

- (a) The application of fundamental auditing principles and concepts
- (b) The requirements of national companies' acts on auditing
- (c) The application of national generally accepted auditing standards
- (d) The application of ISAs and International Auditing Practice Statements
- (e) National ethical codes of conduct for professional auditors and the IFAC International Code of Ethics
- (f) The auditors' and management's responsibilities for the detection and reporting of fraud, errors and illegal acts
- (g) The ethical considerations relating to the engagement and continuance of audit clients
- (h) Communications with predecessor auditors
- (i) Withdrawal from professional engagements and factors affecting such decisions
- (j) Preparing, issuing and revising audit engagement letters
- (k) The roles of the board of directors, audit committees, and the chief financial officer (CFO)

3.8.5 Audit evaluation and planning

- (a) Establishment of the objectives, scope and critical aspects of an audit
- (b) The importance of knowledge of the business and other operations of the entity being audited
- (c) Development of the audit plan to meet those objectives
- (d) Performance, delegation, supervision and review of the audit work performed
- (e) Identification of sources of audit evidence and the relationship of audit evidence to critical audit objectives
- (f) Use of management estimates in performing an audit
- (g) Establishment of materiality levels, statistical sampling and sampling sizes
- (h) Determination of the areas of audit risks and the consideration of inherent risks, control risks and detection risks
- (i) Analysis of the consistency of financial and related information by substantive analysis, including analytical procedures
- (j) Design, documentation and re-evaluation of the audit plan
- (k) Evaluation of the management information systems

3.8.6 Evidence collection and analysis

- (a) Collection of evidence using a variety of sources and methods including: inspection of records,

- documents and tangible assets; observations of processes or procedures performed by others; oral and written inquiries to independent parties; computations, ratios, trends and other analytical procedures
- (b) Selection of audit procedures appropriate to the industry, business and core processes
 - (c) Identification and application of sampling techniques
 - (d) Evaluation of the evidence collected, both oral and written, for reliability and sufficiency
 - (e) Recognition of mutual cooperation; similarities and differences in the work of the internal and external auditors
 - (f) Recognition of the needs and limitations of the use of independent experts

3.8.7 The performance of an audit

- (a) Determination and documentation of the internal controls, including methods of preparing audit working papers
- (b) Design of the audit program
- (c) Assessment of internal controls
- (d) Performance tests of the systems controls
- (e) Evaluation of the results of tests and the re-evaluation of inherent and control risks
- (f) Application of substantive analysis, substantive sampling and evaluation of test results
- (g) Determination and analysis of the inter-relationship of tests

- (h) Alteration (modification) of tests in the light of test results
- (i) Comparison of test results with evidence from other tests, critical audit objectives, and risk evaluation and materiality levels
- (j) Response to potential weaknesses in the system and areas of concern evidenced by substantive tests
- (k) Introduction to the utilization of computer assisted audit techniques and testing management information system controls
- (l) Consideration of relevant legislation on the performance of an audit
- (m) Performance of substantive procedures in relation to balance sheet items
- (n) Evaluation of the sufficiency, relevance and reliability of evidence and amending the audit plan
- (o) Evaluation of the quality of the audit

3.8.8 The audit reporting framework

- (a) Review of events that are subsequent to the date of the balance sheet
- (b) Evaluation of going-concern risks, management representations and the truth and fairness or fair presentation (or alternative reporting requirements) of financial statements
- (c) Identification of and recommendations on compliance with enterprise policies, on appropriate actions on weaknesses and on the efficiency of operations found during the audit

- (d) Formulation of an audit opinion

3.8.9 Internal auditing – its objectives and functions

3.9 Module on business finance and financial management

The module views accounting students as future sophisticated technical users of financial management information with a focus on corporate and business finance. Thus, the module should be taught from an accountant's point of view i.e. emphasizing the ability to use business finance reports as well as a thorough familiarity of how these reports are prepared. Also, discussion of economic concepts and models should not overlap with what is covered in the module on economics.

The objective of this module is to provide an introduction to the theory and practice of business finance and a sound basis for further study of accounting to ensure that candidates understand the financial management methods used for analyzing the benefits of various sources of finance and capital investment opportunities. On completion of this module the individual should be able to:

- evaluate capital investments through the use of appropriate methods and techniques, and make allowances for the effects of taxes, inflation, risks, and uncertainty

- understand the financial context in which the firm operates
- analyze and evaluate different methods used in business finance decision-making
- understand the practical implications of finance theory for decision making in investment decisions
- appreciate the nature and scope of working capital management
- evaluate capital investments through the use of appropriate methods and techniques, & make allowances for the effects of taxes, inflation, risks & uncertainty
- make reasoned decisions in the area of financial management and be able to adapt to changes in factors affecting those decisions
- appreciate the interpretation, use, and limitations of financial statements and financial information

3.9.1 The financial objectives of different types of organizations

- (a) The nature, purpose and scope of financial management
- (b) The relationship between financial management, management accounting and financial accounting
- (c) The relationship of financial objectives to organizational strategy and to other organizational objectives
- (d) The nature, scope and form (long-term and short-term) of financial objectives of business organizations

- (e) The roles, responsibilities and relationships of key personnel involved in and with organizations (shareholders, lenders, managers, employees, customers, suppliers and government)

3.9.2 The framework of financial management

- (a) The commercial and financial environment in which organizations operate (the nature and function of the money and capital markets including banks and other financial intermediaries, and various national stock exchanges and the over-the-counter markets)
- (b) The application of macroeconomic theory as a basis for understanding the key economic variables affecting the business environment
- (c) The significance of corporate securities (share, capital, debt and preference shares) to commercial organizations and the markets in which they operate, and the influence of markets on organizations

3.9.3 The management of working capital

- (a) The nature and scope of working capital management
- (b) The importance of effective working capital management to corporate survival
- (c) Credit management and cash management systems: The selection of appropriate cash balances and managing cash surplus and deficits;

- the nature and functions of the short-term money market
- (d) The management of debtors (including those overseas): credit evaluation; terms of credit; cash discounts; debt collection techniques; credit management monitoring and evaluation; factoring; and invoice discounting
 - (e) Creditors: the advantages and disadvantages of alternative methods of paying suppliers (including those overseas); the dangers of trading on credit

3.9.4 The sources of finance- basic coverage (financing decisions)

- (a) The nature and importance of internally generated funds
- (b) The cost of capital, including the calculation of effective interest rates
- (c) Capital markets, including the types of share capital, new issues, rights issues, loan capital, convertible securities and warrants
- (d) Determining the requirements for financing (how much, for how long, and for what purpose) in relation to an enterprise's operational and strategic objectives; the importance of the choice of capital structure to an organization
- (e) Identifying and evaluating appropriate sources of finance taking into account such factors as:
 - (i) Cost of finance including its servicing,
 - (ii) Timing of cash payments,

- (iii) Effect of gearing and other ratios,
 - (iv) The effect on the company's existing investors
- (f) Other culturally-determined sources of finance

3.9.5 Capital expenditures and investments – basic coverage (investing decisions)

- (a) How to identify potential investment opportunities
- (b) Financial tools:
 - (i) Compounding and Discounting: the connections with time, with purchasing power, with uncertainty,
 - (ii) Present Values, PV tables, and Net Present Value: concepts and practice.
- (c) Appraising capital investments for commercial organizations through the use of appropriate methods and techniques, including:
 - (i) Return on capital employed,
 - (ii) Payback,
 - (iii) Discounting based methods, including the importance of the cost of capital to investment appraisal and shareholder value,
 - (iv) Internal rates of return.
 - (v) Net present values,
 - (vi) Capital rationing,
 - (vii) Lease or buy decisions
 - (viii) Other culturally-determined methods and techniques

- (d) Managing investment portfolios

3.9.6 The Dividend Decision

3.9.7 Long-term financial planning

- (a) The relationship of investment decisions to long-term financial planning
- (b) Portfolio theory and its relevance to decision-making and financial management practice
Long-term financial planning
- (c) The capital asset pricing model and its uses in financial management
- (d) The significance of the dividend-based model and the capital asset pricing model in calculating the cost of capital
- (e) The cost of various forms of debt
- (f) The use of the “weighted average cost of capital” approach
- (g) The “adjusted present value” approach and its application in decision-making
- (h) Taxation and dividends; the impact of dividends on share prices
- (i) Other culturally-determined long-term financial planning issues

3.10 Module on knowledge integration – a capstone

The objective of the capstone module is to provide the learning processes that develop and reinforce the integration of intellectual reasoning ability, oral and

written communications, and interpersonal skills into the teaching of technical and professional subject matters. It fosters student understanding of the role of accounting in organizations and societies through carefully monitored integration of the knowledge, concepts, skills, and practical applications acquired throughout the student's course of study. The module, taken in the last academic year of study, help students draw upon and integrates concepts from the accounting modules as well as from other business and non-business modules analysing and resolving complex accounting situations. On completion of this module, the individual should be able to:

- Understand the impact of other disciplines on the study and practice of accounting.
- Understand the multi-faceted and interrelated nature of accounting fields.
- Develop a critical understanding of how the application of accounting techniques is affected by organizational context, market developments, and a host of other social, technological, legal, ethical, environmental, regulatory, and political issues.
- Understand how accounting fits within the structure of the organization and how it relates to the external environment with particular emphasis on corporate governance issues.
- Reinforce developed skills and acquired knowledge by performing, interpreting and understanding a variety of accounting techniques useful in solving complex problems.

- Recognize the nature of organizational problem solving perspectives and complexities.
- Analyse problem situations, develop appropriate evaluatory frameworks for use in problem formulation and solution design, and show how financial analysis can enhance management strategy.
- Present findings and ideas using oral and written communication skills.
- Develop social skills by working together in a team environment.

3.10.1 Cover emerging accounting concerns, current professional topics, environmental issues, corporate governance matters, contemporary business and societal themes, and international business developments.

3.10.2 Simulate real-world decision-making contexts by using local and global cases, situation analysis, guest speakers, role-play, team work, and computerized simulation games.

- (a) Students prepare group position papers and present them in class on timely and/or controversial issues such as reporting on enterprise 's contributions to environmental problems.
- (b) Students consider cases with inherent ethical challenges and clarify, refine, and gain insights as to their values.

- (c) Request student groups to adopt a given side on an issue. Students prepare positions and debate them in class and then prepare written reaction papers.
- (d) Using exercises, students forecast uncertain environmental, social, and ethical events and interpret feedback on their impact and accuracy.
- (e) In financing, investing and/or operating decisions, incorporate the financial impact of environmental issues such as waste disposal and depletion of natural resources and the impact on cost and profit calculations in the short and long terms.
- (f) Request students to conduct applied research on tax avoidance and tax evasion issues. Ask them to prepare, discuss, and present position papers to the assigned cases in class.
- (g) Construct role-play situations that focus on regulatory matters such as legislative hearing on utility rates. Working in groups, students participate in a mock hearing to illustrate the role of accounting in regulations. Groups represent different constituencies and argue the rate case before a student group role-playing a citizen group, a utility commission or a legislative committee.
- (h) Discuss corporate governance problems and financial reporting problems issues taken from local, national, and international case studies

4. Elective (advanced) accounting, finance and related knowledge

4.1 Module on advanced financial accounting and reporting for specialized industries

This module deals with accounting and reporting for specialized industries and the accounting treatment and financial reporting of special situations particular to the environment. The objective of this module is to ensure that candidates who seek an in-depth coverage of financial accounting can acquire techniques and develop judgment in advanced accounting and financial reporting in specialized industries, in situations particular to the environment and in advanced accounting topics encountered by professional accountant. The module helps individuals to evaluate and react to current developments or new accounting practices. On completion of this module the individual should be able to:

- carry out and appraise financial reorganization schemes for given situations
- explain the principal aspects of company dissolutions and winding-ups
- account for business combinations (acquisitions, disposals and uniting of interests)
- prepare financial statements for partnerships, branches, joint ventures and individual companies
- prepare special reports for other organizational entities

4.1.1 Financial Reporting for specialized topics

- (a) Joint ventures and associated enterprises
- (b) Environmental cost and liabilities
- (c) Governmental assistance

4.1.2 Financial reporting for specialized industries

- (a) Incorporated enterprises, including the preparation of financial and other statements for internal and external purposes
- (b) Enterprises in the extractive industries
- (c) Construction industry and accounting for construction-type contracts
- (d) Banks, insurance companies and other financial institutions
- (e) Agricultural farms

4.1.3 Accounting for foreign subsidiaries and branches, and accounting for foreign currencies

- (a) Accounting for enterprises in the extractive industries
- (b) Accounting in the construction industry and accounting for construction-type contracts
- (c) Accounting for banks, insurance companies and other financial institutions
- (d) Accounting for agricultural farms

4.1.4 Special issues relating to accounting for reconstructions, uniting of interests and business combinations

- (a) Accounting for changes in organizational structures:
 - (i) Single companies: The principles of acquisitions, financial reorganizations and rationalizations
 - (ii) Groups: acquisitions and other changes of parent company interests

- (b) The major features of reorganizations, uniting of interests and takeovers, their principal aspects, regulatory and audit consequences in relation to:
 - (i) Control of business combinations and the public interests,
 - (ii) The regulation of takeovers,
 - (iii) Management responsibilities in takeover situations,
 - (iv) Minority rights

4.1.5 Accounting for the winding up of an enterprise

4.1.6 Advanced analysis and appraisal of financial and related information

- (a) Evaluating the internal consistency and validity of the information collected and otherwise produced for accounts

- (b) Identifying matters for further interpretation of information produced (e.g. by comparing it to other information such as prior years' data, budgets and other targets, industry norms, and the state of the economy)
- (c) Analyzing and interpreting accounts and statements (e.g. by ratio analysis) for indications of aspects of business performance (such as value for money, quality, long-term solvency and stability, short-term solvency and liquidity, profitability, efficiency, growth and failure prediction) using, for example;
 - (i) Inter-temporal analysis,
 - (ii) Intra- and inter-firm comparisons,
 - (iii) Trend analyses
- (d) The use of computers for financial analysis purposes;
 - (i) Horizontal analysis,
 - (ii) Vertical analysis,
 - (iii) Ratio analysis

4.1.7 Financial reporting for governmental organizations

- (a) Understand principles of accounting for state governments as well as local political subdivisions such as municipalities, ports, and fire districts.

- (b) Principles of accounting and financial reporting for state and local government.
- (c) Accounting for general funds, special revenue funds, general fixed assets, capital projects funds, general long-term debt and debt service funds.
- (d) Accounting for fiduciary and business-type activities
- (e) Analysis of governmental financial performance

4.1.8 Financial reporting for non-governmental not-for-profit organizations

- (a) Understand principles of accounting for non-profit, non-governmental colleges and universities, health care providers and voluntary health and welfare organizations.
- (b) Accounting for health care organizations
- (c) Accounting for Co-operatives

4.1.9 Assessing the impact of price-level changes on financial analyses

4.2 Module on advanced management accounting

The objective of this module is ensure that candidates are competent to prepare and analyze management accounting data, apply it to a range of planning, control and decision-making situations and adapt it to accommodate change. On completion of this module the individual should be able to:

- apply management accounting techniques in planning, control and decision-making situations
- interpret information available from the use of these techniques
- explain current practical methods used in making management decisions and the influence of the environment on such decisions
- review the objectives of management accounting and its role as part of a business information system
- explain the meaning of and the accounting implications of trends in management accounting, such as world class management
- explain the nature of information, its sources, and analyses required for the operation of a management accounting system
- identify relevant costs and appropriate techniques for decision-making and use them in various decision-making situations
- identify, discuss and implement a range of product-pricing methods applicable in particular operating situations
- discuss the characteristics of strategic management accounting decisions
- discuss the performance measures appropriate to different business situations.
- Understand the role of management accounting in dealing with the non-financial performance indicators and the non-financial objectives of enterprises such as environmental and social objectives

4.2.1 Business planning

- (a) Proposing, evaluating and implementing ways to meet short and medium-term financial objectives, such as budgeting, monitoring and controlling cash flow, pricing, raising finance and repaying debt
- (b) The purpose and benefits of setting short-term objectives consistent with long-term strategies
- (c) Seeking, clarifying and confirming information relevant to the determination of business objectives, such as information on current business position and past performance by using ratios and other analyses, and information on planned changes to systems and procedures
- (d) Developing and analyzing business plans to meet agreed objectives, including risk assessment of plans and all aspects of the business that they will influence, and analyses to include measures of value, profit optimization and utility
- (e) Long-term financial planning, including:
 - (i) The issues to be considered when deciding whether to expand through internal growth or through an acquisition,
 - (ii) Strategies a company might use in order to expand or maintain its current market position,
 - (iii) The techniques for valuing individual shares and other securities and for

- valuing a business, and the application of these techniques in merger and acquisition situations,
- (iv) The arguments for and against mergers and acquisitions,
- (v) Methods of financing an acquisition,
- (vi) Appropriate merger and acquisition strategies and tactics,
- (vii) Tactics to follow when defending against a takeover bid,
- (viii) Planning for post-merger success and post-merger audits,
- (ix) Identifying schemes for financial restructuring and the issues involved in the decision process; methods of restructuring; buy-outs; going private; share repurchases; rescheduling debts; and joint ventures

4.2.2 The design of management accounting systems

- (a) Developing and implementing appropriate systems
 - (i) Identification of cost units,
 - (ii) Establishing cost, profit and responsibility centers,
 - (iii) Determining methods for recording relevant information,
 - (iv) The sources of information for recording and processing,

- (v) Computer-based information storage and processing,
 - (vi) Analysis of output information and its dissemination to relevant individuals and departments
- (b) Consideration and application of information requirements in relation to:
- (i) The costing and processing of products and services,
 - (ii) Preparing operating plans,
 - (iii) Monitoring and controlling performance,
 - (iv) Decision-making considerations
- (c) Considerations in negotiating and agreeing information requirements
- (i) The influence of size and the type of enterprise entity,
 - (ii) The nature of activities and output of each entity,
 - (iii) The long-term or short-term nature of decisions,
 - (iv) Management structures and styles,
 - (v) Conditions of uncertainty and risk,
 - (vi) Qualitative and quantitative nature of the information requirements,
 - (vii) Frequency, timing, format and degree of accuracy required

4.2.3 Evaluating the impact of changes in business structures, functions and performance measures on the applicability and appropriateness of management accounting techniques and methods.

4.2.4 Performance measurement for planning and control:

- (a) Measurement of activity, productivity, profitability, quality and service
- (b) The relationship of measurements to the type of entity (e.g. manufacturing or service, profit or non-profit, centralized or decentralized entity)
- (c) Ranges of measures: monetary and non-monetary; the use of percentages, ratios and indices
- (d) The use of indices to allow for price and performance changes through time
- (e) Identification of areas of concern from the information produced
- (f) Relationship between business performance and managerial performance
- (g) Assessing management performance by reference to comparable internal and external information

4.2.5 Other information for decision-making purposes

- (a) Identification and application of relevant costs and appropriate techniques
 - (i) Relevant costs, such as fixed or variable, direct or indirect, avoidable or unavoidable, and opportunity or sunk costs,
 - (ii) Appropriate techniques, such as cost/volume/profit analysis, the use of limiting factors, and the recognition of risks and uncertainties

- (b) Use of relevant information for:
 - (i) Application and interpretation of quantitative techniques for decision-making purposes,
 - (ii) Adoption of new products,
 - (iii) Product mix choices,
 - (iv) Discontinuance of products,
 - (v) Make or buy decisions,
 - (vi) Decisions to sell or to further process products,
 - (vii) Decisions to shutdown or temporarily close selected operations,
 - (viii) The use of indexing of costs and revenues data, (ix) the use of discounted cash flow techniques in longer-term decision-making situations

4.2.6 Non-financial performance indicators such as productivity per employee or per service unit.

4.2.7 The non-financial objectives of enterprises such as environmental and social objectives.

4.3 Module on advanced taxation

The objective of this portion is to develop students' investigative skills through a study of specialized taxation topics relevant to the local needs, develop students' analytical skills through the application of complex taxation policy to practical problems, deepen knowledge of the theoretical and practical aspects of the tax system and extend general theoretical awareness of a the full range of the major taxes within the nation. On completion of this module the individual should be able to:

- Perform Tax planning
- Understand tax avoidance vs. tax evasion
- Understand and perform Inheritance Tax planning and calculation
- Develop working knowledge to deal with VAT, issues & accounting for VAT
- Understand Non-domestic (foreign) activities giving rise to taxation liabilities
- Special regulations applicable to groups of companies
- Understand Trusts and how they function

- Deal with taxes such as excise taxes and road taxes
- Deal with specialized tax issues and policies relevant to the local needs

4.3.1 The income taxation of employees and unincorporated businesses

- (a) The general basis for assessing taxes
- (b) Calculating tax liabilities
- (c) Minimizing and deferring tax liabilities by identifying relevant exemptions, relief and allowances

4.3.2 Trusts

4.3.3 Non-domestic (foreign) activities giving rise to taxation liabilities

- (a) Definitions of residence and domicile
- (b) The national taxation of income earned in the country and gains of non-domiciled individuals
- (c) The taxation of national residents
- (d) The national taxation of overseas gains and income attributable to corporations and to individuals
- (e) The effect of national tax treaties with other countries on tax liabilities
- (f) The effect of business structures (branches, subsidiaries) on tax liabilities

- (g) The effect of transfer pricing on overseas and national tax liabilities
- (h) Other tax planning considerations

4.3.4 Taxation treatment and special concessions of emigrant workers remittances

4.3.5 Value-added tax schemes- C/E

4.3.6 Inheritance tax –C/E

4.3.7 Other taxes (excise taxes and road taxes) and culturally-determined taxes – C/E

4.3.8 National insurance schemes –C/E

4.3.9 Social security schemes –C/E

4.4 Module on advanced business law

The objective of this module is to cover topics of special legal issues specific to the local needs such as national security laws, to allow for an in depth coverage of topics in the core module, and to expand coverage of ethical, social, legal, and regulatory environment of business. On completion of this module individuals should be able to:

- explain the management and administration of a company with respect to directors, company officers, auditors and company meetings

- understand the intricacies of management and administration of companies
- understand the nature of a limited liability company
- acquire knowledge as to the laws of associations such as clubs and partnerships
- discuss and the legal, social, regulatory, and ethical environments of business
- understand other legal issues peculiar to the local setting.

4.4.1 The nature of a limited liability company

- (a) The difference between a limited liability company and a partnership
- (b) The advantages and consequences of forming a limited liability company

4.4.2 Capital and the financing of companies

- (a) Share capital
 - (i) The issuance and transfer of shares,
 - (ii) Purchase and redemption of shares,
 - (iii) Dividends
 - (iv) Charges against the capital of a company
- (b) Loan capital
 - (i) Borrowing powers
 - (ii) Types of debentures and their creation,

- (iii) Company charges for loan capital,
- (iv) Registration of loans,
- (v) Remedies of loan creditors

4.4.3 The management and administration of companies

- (a) Company directors:
 - (i) Appointment and termination of office
 - (ii) Duties and powers
 - (iii) Contractual capacity of directors
 - (iv) Self-dealing by directors
 - (v) Shareholder remedies
- (b) Company officers: titles and responsibilities
- (c) Differences between officers' and directors' duties and responsibilities
- (d) The company secretary: appointment, role and duties
- (e) Shareholders: majority control and the rights of minorities
- (f) External auditors:
 - (i) The appointment and re-appointment of auditors,
 - (ii) Removal, resignation and replacement of auditors
 - (iii) Duties and responsibilities
- (g) Formal company meetings
- (h) National regulatory bodies of companies:

- (i) Agencies applicable to all companies
- (ii) Agencies applicable to publicly held companies, including securities and exchanges organizations
- (i) Employment laws and labor union contracts

4.4.4 Laws of insolvency; procedures for filing for insolvency under relevant laws; rights of creditors and other interested parties.

4.4.5 Laws of associations such as clubs and partnerships to carry out certain activities; rights and duties of members and partners of such associations; rights of third parties; rules governing financial statements and prospectuses.

4.5 Module on advanced auditing

The objective of this module is to ensure that candidates have developed a thorough knowledge and understanding of auditing principles and concepts and can begin to apply this grounding to the situations that they will typically encounter in practical work situations. On completion of this module individuals should be able to:

- interpret, apply and appraise critically emerging professional auditing issues and international standards of auditing.

- review events subsequent to the date of the balance sheet for their effect on the financial statements; review the condition of the enterprise as a going concern; review management representations; and review the truth or fairness of the information which the financial statements purport to represent
- explain the significance of communication to management and directors
- prepare and understand various forms of audit reports and their significance
- perform auditing procedures on computerized business systems
- be familiar and understand audit software uses and limitations
- discuss and implement advanced and specialized auditing practices and procedures
- understand auditors' professional liabilities
- understand operations auditing and how it relates to financial auditing
- understand basic features of environmental auditing, how to perform and how it is related to financial auditing.

4.5.1 Communications with boards of directors and management concerning internal control weaknesses detected in audits

4.5.2 Evaluation of computer-based systems (align with AIS and IT modules)

- (a) Legal, ethical, auditing and information system control standards:
 - (i) Legal and ethical requirements,
 - (ii) Auditing standards relevant to information technology (IT),
 - (iii) Computer control guidelines

- (b) Evaluation objectives:
 - (i) Efficiency, effectiveness and economy of IT use,
 - (ii) Compliance with policies, statutes and regulations,
 - (iii) Evaluation of internal control in computer-based systems,
 - (iv) Fairness of financial statement representations and the accuracy and completeness of accounting records

- (c) Evaluation methods and techniques:
 - (i) Planning, scheduling and staffing
 - (ii) Obtaining an understanding of systems in the business context
 - (iii) Documenting systems and elements of control structure,
 - (iv) Tests of features, controls, transactions and balances,
 - (v) Supervision, review and quality assurance

- (d) Communicating the results of evaluations:

- (i) Types of reports,
 - (ii) Levels of assurance,
 - (iii) Importance of communication skills
- (e) Following up– frequency, timing & reporting
- (f) Specific types of evaluations:
- (i) System acquisition and development,
 - (ii) System implementation,
 - (iii) System maintenance and program changes,
 - (iv) IT asset safeguarding,
 - (v) Data integrity, privacy and security,
 - (vi) Continuity of processing and disaster recovery, planning,
 - (vii) System processing operations and related activities,
 - (viii) Application processing.
- (g) Computer-assisted audit techniques (CAATs):
- (i) Approaches,
 - (ii) Professional standards,
 - (iii) Feasibility considerations,
 - (iv) Categories, definition and design of CAATs,
 - (v) Execution and control of CAATs

4.5.3 Audit software (align with AIS module and IT module)

- (a) Capabilities and limitations of generalized audit software

- (b) Steps in managing generalized audit software
- (c) Problems in using generalized audit software
- (d) Capabilities and limitations of industry-specific audit software
- (e) Use of systems software and specialized audit software
- (f) Control and integrity issues in specialized audit software

4.5.4 Auditors' risks of professional liabilities

- (a) Significance of the problem
- (b) Functions and duties of independent auditors for serving the public interest – clients and third parties
- (c) Auditors' liabilities to clients and to third parties for their actions
- (d) Liability laws in civil law countries
- (e) Liability laws in common law countries
- (f) Fraud vs. negligence
- (g) Professional liability insurance
- (h) What auditors can and should do to minimize their risks
- (i) Corporate governance and the auditors

4.5.5 Organizing and planning complex audit situations, including group audits and joint audits applying international auditing standards

- (a) Using the work of internal auditors, other external auditors and independent experts

- (b) Special purpose audit engagements, including investigations, and related service engagements
- (c) Attestation services
- (d) Auditing for compliance with laws and regulations
- (e) Other auditing of performance
- (f) Reviewing financial statements for compliance with International Accounting Standards
- (g) Monitoring and evaluating important theories, developments, issues and controversies in international accounting and auditing standards, international case law and audit regulations and their implications for the auditing profession
- (h) Monitoring the impact of information systems development on the audit process, including the impact of computers on the auditing process
- (i) Audits of banks, insurance companies and other financial institutions
- (j) Audits of small businesses
- (k) Auditing of governmental organizations
- (l) Auditing of other not-for-profit organizations
- (m) Non-financial auditing – types, objectives and methods; management auditing and operational auditing by professional accountants

4.5.6 Environmental audit

- (a) Environmental performance indicators
- (b) Financial performance indicators
- (c) Accounting issues in environmental audit
- (d) Audit report

4.5.7 Operations and performance auditing

4.6 Module on advanced business finance and financial management

The objective of this module is to establish and deepen critical analysis of the financial management function, to provide an advanced analysis of the theory and practice of business finance to ensure that candidates understand advanced financial management tools and techniques and be able to deal with special problems of financial management in the public sector as well as concepts, tools, and techniques of treasury management. On completion of this module the individual should be able to:

- identify appropriate sources of finance for particular situations and assess the impact of each upon the capital structure of a particular entity
- understand the concepts behind available theoretical financial models and assess the relevance of developments in financial management theory to an enterprise
- select the techniques most appropriate to optimize the employment of resources including the most effective method of financing
- understand the workings of the national and international financial systems and evaluate alternative sources of finance
- describe and discuss the development of the function of treasury management within

organizations, in particular the working capital aspects and international considerations

- appreciate the interpretation, use, and limitations of financial statements and financial information
- demonstrate the theory behind risk analysis and how to quantify risk
- demonstrate awareness of the issues surrounding the optimum cash balance and the cost of capital as the link between the firms financing and investment decisions
- critically analyze and evaluate available methods of asset pricing
- appraise, select and apply models for the analysis of investments within a portfolio context
- appraise and measure the performance and management of investment portfolios
- discuss and apply derivatives analysis to the control of contemporary business, commercial and other organizations
- comprehend the regulation of financial markets from the standpoint of the impact of derivatives.

4.6.1 The financial objectives of special types of organizations

- (a) The nature, purpose and scope of financial management
- (b) The nature, scope and form (long-term and short-term) of financial objectives of special types of organizations, including not-for-profit organizations

- (c) Problems faced by small enterprises in obtaining financing

4.6.2 The framework of financial management

- (a) Advanced applications of macroeconomic theory as a basis for understanding the key economic variables affecting the business environment
- (b) Fiscal policies: their nature and the effectiveness of fiscal policy
- (c) Money and interest rates, the role of money in the economy, and the supply and demand for money –
- (d) Monetary policies: attitudes to monetary policies and their problems
- (e) Supply-side policies and problems and policies to improve supply-side policies
- (f) Policies towards monopolies and oligopolies, privatization and deregulation
- (g) Environmental (“green”) policies and their implications for the management of the economy and the firm
- (h) The “efficient markets” hypothesis and its relevance to decision-making and to financial management practice

4.6.3 Special problems of financial management in the public sector.

4.6.4 The sources of finance- in-depth coverage (advanced financing decisions and culturally-determined issues.

- (a) The impact of capital market derivatives
- (b) The determination of equity prices –
- (c) The effect of dividend policies on financial needs and the formulation of dividend policies
- (d) Bank finance: the various forms of short-, medium- and long-term finance that are available, including leasing arrangements
- (e) Trade credit
- (f) Government sources: grants, local, regional and national aid schemes, tax incentives, etc.
- (g) Venture capital and financial sources particularly suited to the small enterprise
- (h) International money and capital markets, including banking and the financing of foreign trade
- (i) Determining the requirements for financing (how much, for how long, and for what purpose) in relation to an enterprise's operational and strategic objectives; the importance of the choice of capital structure to an organization
- (j) Financial and actuarial mathematics
- (k) Calculating financial gearing and other key financial ratios and analyzing their significance to the organization
- (l) Negotiating term loans with banks and other financial institutions
- (m) Micro credit programs to finance development in rural areas

4.6.5 Capital expenditures and investments – in-depth coverage (advanced investing decisions as well as culturally-determined issues)

- (a) How to identify potential investment opportunities
- (b) Appraising capital investments for non-commercial organizations through the use of appropriate methods and techniques, including:
 - (i) Return on capital employed
 - (ii) Payback
 - (iii) Discounting based methods, including the importance of the cost of capital to investment appraisal and shareholder value
 - (iv) Internal rates of return.
 - (v) Net present values
 - (vi) Capital rationing,
 - (vii) Lease or buy decisions
- (c) The effects of taxation and inflation on investment decisions and the handling of risks and uncertainties, for example through the use of probabilities, sensitivity analysis and simulations
- (d) Portfolio performance

4.6.6 Treasury management

- (a) Optimizing the flow of financial assets for an organization or an individual

- (b) Risk management and cost saving within the organization by use of:
 - (i) Options, including caps, floors and collars
 - (ii) Futures
 - (iii) Swaps
- (c) The scope and benefits of financial engineering
- (d) Foreign exchange markets and hedging against foreign exchange risks
- (e) The use of financial derivatives, including the Black-Scholes option-pricing model
- (f) Derivative regulations & accounting standards

4.7 Module on accounting internship

If the curriculum is delivered by an academic institution formalized learning experience in combination with practice of accounting while engaged in an internship with a public accounting firm, business, or other off-campus organization is highly encouraged, thus the accounting internship module. Students should be encouraged to have an internship for few weeks during the last two years of their studies. These internship opportunities should be made available by professional bodies, accounting firms, industry, and government. If the internship module is offered as part of the formal student academic program, the academic institution should specify the requirement of successful completion of the internship. For example, for a student taking the internship as a module, prior approval of

learning plan, a project, and a summary report of learning experience should be required of the student. Students should devote a specified number of hours between internship employment hours and student-intern project hours. The primary objective of the student intern project is to enhance the educational value of the student's internship experience. The academic institution should issue guidelines as to the type of work expected of the intern during the internship and the extent of compensation, if any.