## **SYLLABUS**

# Postgraduate Programme in Business Management

Batch 2012-14

Office of the Dean



June 2012

#### **Preface**

#### Programme Design and Requirements

		IICS

CORE	Courses

- I.1 Macroeconomic Theory and Policy
- I.2 Managerial Economics

#### **ELECTIVES**

- I.3 Basic Econometrics
- I.4 Demand and Business Forecasting [also POM]
- I.5 Development Economics
- I.6 Economics of Human Resources
- I.7 Economics of Information and Network Industries
- I.8 Entrepreneurship and New Ventures [also SM]
- I.9 Firms, Markets and Global Dynamics
- I.10 Industrial Economics and Competitive Strategies
- I.11 International Business Economics [also Finance]
- I.12 Managing Private-Public Partnerships [also SM]
- I.13 Money Banking and Finance
- I.14 Social Banking and Microfinance
- I.15 Strategic Game Theory for Managers [also SM]
- 1.16 Time Series Analysis [1.5 credits]

#### II. FINANCE

#### **CORE COURSES**

- II.1 Financial Management-I
- II.2 Financial Management-II
- II.3 Management Accounting-I
- II.4 Management Accounting-II

## **E**LECTIVES

- II.5 Behavioural Finance [1.5 credits]
- II.6 Business Analysis and Valuation
- II.7 Capital Expenditure Planning and Control
- II.8 Commercial Banking
- II.9 Commodities Derivatives Market
- II.10 Corporate Taxation
- II.11 Financial Analysis, Planning and Control
- II.12 Financial Decision Making under Information Asymmetries [1.5 credits]
- II.13 Financial Markets
- II.14 Financial Modeling Using Excel
- II.15 Financial Risk Management
- II.16 Financial Technical Analysis and Introduction to
  - Global Intermarket Analysis [1.5 credits]
- II.17 Fixed Income Securities
- II.18 Indian Accounting Standards [1.5 credits]
- II.19 International Business Economics [also Eco]
- II.20 International Financial Management
- II.21 Issues in Empirical Finance

II.22	Mergers, Acquisition and Corporate Restructuring [also SM]
II.23	Options and Futures
II.24	Risk Management and Insurance
II.25	Security Analysis and Portfolio Management
II.26	Social Finance, Impact Investing & Insurance
II.27	Structured Finance
CENER	AL MANAGEMENT
CORE C	-
III.1	Business Law [2 credits]
III.2	Business Research Methods [2 credits]
III.3	Managerial Communication
III.4	Managerial Ethics [2 credits]
ELECTIV	
III.5	Analysis for Managerial Decision Making
III.6	Corporate Image Building
III.7	Emotional Intelligence and Managerial Effectiveness
III.8	Marketing Law [also Marketing]
INFOR	MATION SYSTEMS
CORE C	OURSES
IV.1	Management Information Systems
ELECTIV	/ES
IV.2	Business and Data Communications Networks
IV.3	Business Intelligence and Data Mining
IV.4	Business Modeling Through System Dynamics
IV.5	Cyber Law
IV.6	Data Structures
IV.7	DBMS with Oracle
IV.8	Decision Support Systems
IV.9	e-Business [also POM]
IV.10	Enterprise Resource Planning [also POM]
IV.11	I S Strategy [also SM]
IV.12 IV.13	Information Security and Risk Management Intellectual Property Rights
IV.13 IV.14	
IV.14 IV.15	Managing Business Process Outsourcing Object-Oriented Programming
IV.15 IV.16	
10.10	Software Project Management
MARKI	ETING
CORE C	OURSES
V.1	Marketing Management-I
V.2	Marketing Management-II
ELECTIV	/ES
V.3	Advertising and Sales Promotion
V.4	Business-to-Business Marketing
V.5	Competition and Globalisation [also SM]
V.6	Consumer Behaviour
V.7	International Marketing

III.

IV.

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V.8	Internet Marketing [1.5 Credits]
V.9	Marketing Decision Models
V.10	Marketing Fair
V.11	Marketing in Practice
V.12	Marketing Law [also GM]
V.13	Marketing Research
V.14	Pricing Management
V.15	Product and Brand Management
V.16	Retail Management
V.17	Rural Marketing [1.5 Credits]
V.18	Sales and Distribution Management
V.19	Services Marketing
V.20	Strategic Marketing [also SM]
ORGA	NISATIONAL BEHAVIOUR
Core (	Courses
VI.1	OB-I: Individual and Group Behaviour in Organisation
VI.2	OB-II: Organisational Structure, Design & Change
ELECTI	VES
VI.3	Assertiveness Training
VI.4	Balanced Score Card [also SM]
VI.5	Building Learning Organisations [also SM]
VI.6	Consulting to Management
VI.7	Corporate Governance
VI.8	Cross-Cultural Management
VI.9	Designing Organisations for Uncertain Environment [also SM]
VI.10	Indian Philosophy and Leadership Excellence
VI.11	Leadership, Influence and Power
VI.12	Management of Creativity
VI.13	Management of Relationships
VI.14	Personal Effectiveness and Self-Leadership
VI.15	Personal Growth Lab
VI.16	Political Behavior & Impression Management in Organizations
VI.17	Stress Management
VI.18	Transactional Analysis
VI.19	Zen and the Executive Mind

## VII. HUMAN RESOURCE MANAGMENT

## CORE COURSE

VI.

VII.1 Human Resource Management [2 credits]

## VIII. PRODUCTION, OPERATIONS & DECISION SCIENCES

## **CORE COURSES**

VIII.1	Operations Management - I
VIII.2	Operations Management - II
VIII.3	Operations Research [2 credits]
VIII.4	Quantitative Techniques - I
VIII 5	Quantitative Techniques - II

#### **E**LECTIVES

VIII.6	Advanced	Inventory	Control
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- VIII.7 Advanced Operations Research
- VIII.8 Demand and Business Forecasting [also Eco]
- VIII.9 e-Business [also IS]
- VIII.10 Enterprise Resource Planning [also IS]
- VIII.11 Logistics and Supply Chain Management
- VIII.12 Materials Management
- VIII.13 Production Planning and Control
- VIII.14 Project Management
- VIII.15 Service Operations Management [1.5 Credits]
- VIII.16 Supply Chain Analytics
- VIII.17 Technology Management [also SM]
- VIII.18 Theory of Constraints
- VIII.19 Total Quality Management

#### IX. STRATEGIC MANAGEMENT

#### **CORE COURSE**

- IX.1 Introduction to Sustainable Development and Corporate Sustainability [2 credits]
- IX.2 Strategic Management

#### **ELECTIVES**

- IX.3 Advanced Environmental Management and Green Marketing
- IX.4 Applied Quantum Innovations
- IX.5 Balanced Score Card [also OB]
- IX.6 Building Learning Organisations [also OB]
- IX.7 Business Networking [1.5 Credits]
- IX.8 Competition and Globalisation [also MKG]
- IX.9 Contemporary Business Practices
- IX.10 Designing Organisations for Uncertain Environment [also OB]
- IX.11 Entrepreneurship and New Ventures [also ECO]
- IX.12 Entrepreneurship Planning and Development: with special reference to Tech-Entrepreneurs and Professionals
- IX.13 International Management
- IX.14 I S Strategy [also IS]
- IX.15 International Relations and Management
- IX.16 Introduction to Social Entrepreneurship
- IX.17 Managing Private-Public Partnerships [also ECO]
- IX.18 Mergers, Acquisition and Corporate Restructuring [also FINANCE]
- IX.19 Resource Based Strategy
- IX.20 Strategic Game Theory for Managers [also ECO]
- IX.21 Strategic Marketing [also MKG]
- IX.22 Strategies of Co-operation
- IX.23 Technology Management [also POM]
- IX.24 Transformation for Sustainable Superior Performance

## PREFACE

The Syllabus Book presents the broad objectives, structure, and contents of our two-year Postgraduate Diploma Programme in Business Management. The syllabus is directional in scope and permits the much desirable flexibility to keep pace with the evergrowing body of knowledge, experiments and explorations in management education with special emphasis towards the human side of enterprise.

The programme is recognised by the Government of India, Ministry of Education and Youth Services (Technical Division), New Delhi as per its Office Memorandum No. F-18.8/68-T.2, dated 2nd January 1970, and is equivalent to MBA.

The Association of Indian Universities and All India Council For Technical Education have also recognised the programme as equivalent to MBA.

June 2012 XLRI Jamshedpur

## PROGRAMME DESIGN AND REQUIREMENTS: BM 2012-14 BATCH

The two-year Postgraduate Diploma Programme in Business Management prepares a student for a career in industry and services. The programme facilitates learning in theory and practice of different functional areas of Management and to equip the students with an integrated approach to management function and managerial skills.

The courses are designed to develop - (i) the analytical, problem solving and decision making abilities, (ii) the awareness of the socio-economic environment, and (iii) the personality with socially desirable values and attitudes. Towards these objectives and to suit the contents of each course, a variety of teaching methodologies, such as case studies, role-play, problem solving exercises, group discussion, computer simulation games, audio-visuals, are used in the programme.

The programme requirements include 105 credits (63 credits from core courses and 42 credits from elective courses), a Summer Project and compulsory participation in Team Building and Village Exposure Programmes.

(1) Summer Project – a Non-credit Course

Summer Project is a compulsory non-credit course. A student is required to do a summer project on any aspect of Business Management in the industry for eight to ten weeks at the end of the first year (April - June).

(2) <u>Team Building and Village Exposure Programmes</u> – a Non-credit Programme

A three-day team building programme is compulsory for the students. The objective of the programme is to develop leadership and team work through adventure activities (The programme includes overnight camping in tents.)

A village exposure programme is also mandatory for the students. The students are expected to stay in the villages. They are expected to study some of the practices and issues relating to rural India.

A student can opt for a dissertation in lieu of one full credit elective course in Term V. However, only those students meeting the following criteria will be eligible to do dissertation on a topic of their choice in a related field of HRM or BM

- (a) Secures a minimum CQPI of 5.5 in the courses up to Term III and
- (b) The core courses average [upto Term I to III of the area of dissertation topic should be 6.00 or more.

Most of the core and elective courses are of full-credit courses i.e. 3 Credits. There are some core and elective courses which are offered as two-credit and half-credit also. Students who would be opting for half-credit elective courses should take them in pairs (except in case of audit courses) so that they complete the required number of credits. Half credit courses can be taken in different terms and in different functional areas.

Each full credit course [3 Credits] implies a total of 30 contact hours, and is organised during a Term of 10 to 12 weeks. The courses are offered in the following areas:

- 1. Economics
- 2. Finance
- 3. General Management
- 4. Human Resource Management
- 5. Information Systems
- 6. Marketing
- 7. Organisational Behaviour
- 8. Production, Operations & Decision Sciences
- 9. Strategic Management

The total number of credits for the core courses are 63 (Sixty-Three) credits. The Term-wise distribution of courses in the first year shall be 6-7-7. The remaining three core courses shall be scheduled in the second year. During the second year, in addition to the three core courses, a student is required to do 14 (fourteen) elective courses. The total workload for a student in any Term should not exceed 6 courses (18 credits).

Out of the 14 electives in the BM programme, a student is free to choose electives from any area. However, to fulfil the requirement of area(s) of specialisation, a student is required to do an equivalent of five full credit electives (which could be in the form of full credit or half credit) in an area listed below:

- 1. Economics
- 2. Finance
- 3. Information Systems
- 4. Marketing
- 5. Production, Operations & Decision Sciences
- 6. Strategic Management

A student can opt for a maximum of two areas only. A few elective courses are common to more than one area. Therefore, such electives will be counted in one area only as per the choice of the student.

The elective courses listed in this booklet are the total list of approved electives for the Programme. The list of electives to be offered in a particular term would be decided by the respective areas and communicated from time to time.

### I ECONOMICS

## I.1 MACROECONOMIC THEORY AND POLICY

#### [3 Credits]

#### **Objectives**

This course exposes students to an overview of an exchange based economy and draws out the relationship between crucial macroeconomic variables like the level of income, employment, prices, investment, money supply, trade and forex, etc. The design of government policy measures in regulating and planning for the economy will be discussed. Specific problems like inflation, growth and the control of business cycles will be addressed, with respect to the Indian economy. The purpose is to provide the students with a fundamental knowledge of the macroeconomy on the basis of which policy decisions can be analysed and business decisions can be made.

#### **Topics**

- 1. Introduction: Schools of Macroeconomic Thought
- 2. National Income Accounting
- 3. The Simple Keynesian Model: Multiplier
- 4. The Complete Keynesian Model IS-LM Framework
- 5. Monetary and Fiscal Policies in a Closed Economy
- 6. Aggregate Demand and Aggregate Supply, Long-run Aggregate Supply and Growth Models Applications:
  - Indian experience with overall and sectoral growth,
  - Inter-sectoral linkages and role of foreign direct investment
- 7. Balance of Payment and Exchange Rate Determination

## Applications:

- India's experience with exchange rate
- ullet Impact of fluctuations in exchange rate on export, import and growth of domestic industry
- 8. Open Economy Macroeconomics IS-LM Framework
- 9. Fiscal and Monetary Policies in an Open Economy

## Applications:

- · Capital account convertibility debate in India
- Macroeconomic crises: explaining the experiences around the world
- 10. Inflation, Unemployment and the Labour market

## Applications:

- Labour market reforms.
- 11. International Trade Theory and Policy

## I.2 MANAGERIAL ECONOMICS

## [3 Credits]

## **Objectives**

The objective of this course is to equip the manager with the methodology of decision making using the concepts of microeconomics. Starting out with an exposition of the theory of decision making by households and firms, the participants will be made to comprehend the working of the markets, the determination of prices and the techniques of decision making that the players in the market can adopt to ensure that sound decisions are made.

- 1. Introduction to Managerial Economics; The roles of the firm and the House hold
- 2. Decision Making in the Household
  - Consumer Choice
  - Theory of Demand; its Determination, Estimation and Forecasting
- 3. Decision Making in the Firm
  - Production
  - Cost
  - Supply: its Determination and Derivation
- 4. Equilibrium in Different Market Structures
  - Competitive markets- Equilibrium in the short run and long-run
  - Monopoly equilibrium and pricing practices of firms with market power
  - Oligopoly: Strategic interactions and its game theoretic analysis
- 5. Analysis of the Markets for Factor Inputs
- 6. The Economics of Information
  - The problem of Adverse Selection
  - Moral Hazard problem
- 7. Market Failure
  - Externalities
  - Public Goods

## I.3 BASIC ECONOMETRICS

#### [3 Credits]

## **Objectives**

Objective of the course is to introduce the students to basics of theory and application of econometric methods. Emphasis is on understanding and interpreting relations among economic variables which have a direct impact on the way business is conducted in the world market. The course would take hands-on approach to help students get comfortable with working with dataset. The course would address the problems typically encountered in conducting empirical econometric research, in evaluating results and testing hypotheses in making predictions.

#### The course aims at:

- Familiarizing students with the basic concepts of econometrics
- F Help students learn the theoretical aspects of simple and multivariate regression analysis
- The Carry out econometric applications on problem sets and interpret the results of multivariate regression using statistical software program SAS.

- 1. Introduction to Econometrics
  - Introduction to what is econometrics and steps taken by an econometrician in carrying out an empirical study.
  - Different data types cross section, time series and panel data and problems associated with them examples from Indian context
- 2. Linear Regression Model
  - Basic concepts of regression analysis Illustration with two variables Linear Regression Model
  - Estimation using the method of Ordinary Least Squares (OLS)
  - Properties of Estimators
  - Introduction to Multiple Linear Regression Model
  - The Precision of the Estimators and the Goodness of Fit
  - Tests of Hypothesis
  - Scaling and Units of Measurement
- 3. The Multiple Linear Regression Model
  - Estimation using the method of OLS CLRM assumptions and properties of Estimators
  - Goodness of Fit and General Criteria for Model Selection
  - Testing Hypothesis
  - Specification Errors
  - The assumption of Multicollinearity Exact Multicollinearity; near Perfect Multicollinearity
- 4. Choosing Functional Forms and Testing for Model Specification
  - Extensions of the Simple Linear Regression Model Regression through the Origin
  - Functional Forms like Exponential and Logarithmic Functions Linear Log; Log-Linear; Double Log; Reciprocal Transformation; Polynomial Curve Fitting,
  - Introduction to Dynamic Models Lags in Behavior
  - Hypothesis Testing
  - Dummy Variable Regressors Qualitative Variables and their Impact Analysis

- 5. Identifying and Correcting for Violations of the CLRM Assumptions
  - Specification Errors
  - Heteroskedasticity
  - Autocorrelation
- 6. Qualitative and Limited Dependent Variables
  - Regressions on Dummy Dependent Variables Binary Choice Models
  - Logit Model Probit Model Tobit Model Estimation; Assumption; Problems
- 7. Simultaneous Equation Models
  - Structure and Reduced Forms
  - Consequence of Ignoring Simultaneity Identification Problem
  - Estimation and Inference

#### I.4 DEMAND AND BUSINESS FORECASTING

## [3 Credits]

#### **Objectives**

Course is designed to:

- Identify the factors that affect demand
- Expose to the data types and identification problem
- F Equip with qualitative and quantitative forecasting techniques (with focus on non-econometric techniques)
- Illustrate the forecasting techniques with the help of computer softwares
- Enable the interpretation of results

- 1. Demand Analysis: An Overview
  - Significance of Demand Analysis and Forecasting
  - Determinants of Demand, Elasticity of Demand, Revenue and Profit of a Firm
- 2. Estimation of Demand
  - Marketing Research Techniques
  - Consumer Surveys, Consumer Clinics and Focus Groups, Market Experiments in Test Stores
  - Statistical Estimation
  - Variable Identification, Time Series and Cross Sectional Data Collection, Specification of the Model, Estimation of the Parameters, Interpretation of Regression Statistics
- 3. Forecasting Demand
  - Selecting a Forecasting Technique
  - Purpose of Forecast, Type of Users, Patterns in the Data Series, Lead Time, Minimum Data Requirement, Desired Accuracy, Cost of forecasting
  - Qualitative Forecasting Techniques
  - Survey and Opinion Polling Techniques
  - Time Series Analysis
  - Trend Analysis, Cyclical Variations, Seasonal Effects, Random Fluctuations
  - Smoothing Techniques
  - Moving Averages, Exponential Smoothing and Other Advanced Techniques

- Barometric Techniques
- Leading, Lagging and Coincident Economic Indicators
- Diffusion and Composite Indexes
- Accuracy of Forecast
- Short Run Forecast
- Long Term Forecast
- 4. Use of Software Packages for Forecasting

## 1.5 DEVELOPMENT ECONOMICS

## [3 Credits]

#### **Objectives**

This course is intended to provide a review of the main issues in Development Economics, a field that has *several* facets. Analysis of theories, learning from empirical evidence, wherever available and looking at policy measures in the relevant areas will yield a critical understanding of issues that are otherwise left to government (public policy) or NGO (social work) realms. Though managers must accept some national and international level decisions as given, this course is nonetheless important in that it will lead to more aware and sensitive decision-making at a micro level, which also demands an understanding of the larger picture. It will of course, be useful to those aiming for a career in development research and planning, which often provides the base for policy-making. The business manager, with additional skills in development methodology will undoubtedly deliver more effectively.

It is expected that, at the end of this course, students will, inter alia, be in a position to:

- re understand and apply the main theories of economic development
- appreciate the role of markets and institutions in facilitating development
- apply the knowledge and skills acquired to study the main forces sustaining and limiting economic development
- ritically analyse and thereby design effective policy interventions

- 1. Introduction: Economics of Development
- 2. Theories of Economic Growth
- 3. Poverty, Inequality and Economic Growth
- 4. Industrial Development
- 5. Rural-Urban Dynamics
- 6. Population and Development
- 7. Finance for Development
- 8. Trade and Development
- 9. State and the Market
- 10. Privatisation and Regulation
- 11. Institutions and Growth

## I.6 ECONOMICS OF HUMAN RESOURCES

### [3 Credits]

## **Objectives**

As there is sea-change in the economic front, the labour market is bound to be influenced. With the transfer of technology and the increasingly competitive business environment such transformation is often been quite dramatic.

In this course, which is a branch of applied economics, there will be an attempt to identify the principal theoretical approaches and to indicate the direction of empirical research in each area. Theories and examples that are applicable to free market mechanism will be discussed together with the problems and limitations of these tools when there exists a sizeable public sector in the economy.

- 1. Demand for Labour
  - Short run and long run demand for labour
  - Firm's demand and Market demand for labour
  - Competitive and non\(\subseteq\) competitive product markets and changing demand for labour
  - Hiring from alternative skill sets
  - Selection probation, contingent contract
- 2. Supply of Labour
  - Individuals decision to work
  - Market supply of labour
  - Retirement and voluntary retirement schemes
  - Some labour legislations and impact on individual supply of labour
- 3. Labour Market Equilibrium
  - Wage determination
  - Changing market conditions and wages
  - Income taxes and wage
  - Wage regulations and wage
  - Monopsony
  - Internal job markets and different considerations behind wage setting
- 4. Investment in Human Capital
  - Individual's choice of educational attainment
  - Costs and benefits of human capital investments
  - Who should invest in human capital the individual or the firm?
- 5. Employment Contracts and Problems of Information
  - Lack of information about applicant's exact productivity / ability before employment
  - How to best use the signals so that the right person is chosen?
  - Lack of information about efforts put in by employee after appointment
  - How to ensure, without monitoring, that the employee puts in hard work?
  - Team related moral hazards free riding problem
- 6. Compensations and Incentives
  - Straight pay and variable pay
  - What kind of variable pay is best to encourage effort?
  - How to design compensation schemes to motivate older employees to work harder?
  - Compensation for risk of injury designing economically efficient and incentive

compatible wage contracts

- Benefits taxes on benefits vis□à□vis taxes on wages
- 7. Labour Unions and Collective Action
  - Individuals decision to join the union
  - Product market structures and bargaining powers of unions
  - Economics of Strikes
  - Is bargaining by unions good for the economy?
- 8. Labour Mobility
  - Why workers migrate?
  - when to lay off workers? When to expect that the employee will quit?
  - How to design incentives for retaining critical worker?
- 9. Discrimination in the Labour Market
  - Why some workers are discriminated against?
  - Prejudice and lack of information as sources of discrimination
  - Skill differences between social groups as a result of discrimination
  - Laws against discrimination -
  - Employer reaction to such laws
  - How useful are these laws in combating this social evil?
- 10. Evaluation
  - Why does the employer need to evaluate?
  - Which workers should be evaluated? And how frequently?
  - What should be the criteria for evaluation? achievement or ability to achieve?
  - Who should evaluate? an insider or an outsider to the firm?

## I.7 ECONOMICS OF INFORMATION AND NETWORK INDUSTRIES

### [3 Credits]

#### **Objectives**

The objective of this course is to explore the economics of information and network industries and to equip students with an understanding of how economics affect the business strategy of companies in these industries. Managers of tomorrow who understand the economics of these technology intensive industries would be better prepared to beat the competition and be more successful than the others. Probing into the rich literature on price discrimination , bundling, licensing, lock in, and network economics, students would get a rich perspective on the problems of setting prices of information and network goods, on designing product lines for such goods, and on management of intellectual property.

- Introduction to Economics of Information Goods/ Services Industry
- Network Economics
- Pricing of Information and Network Goods
- Compatibility, Product Introduction and Versioning Decisions

## I.8 ENTREPRENEURSHIP AND NEW VENTURES

[3 Credits]

## **Objectives**

The major emphasis of the course will be on creating a learning system through which management students can acquaint themselves with the special challenges of starting new ventures and introducing new product and service ideas. This will involve working together to investigate, understand and internalize the process of founding a startup. Bootstrap and guerilla tactics to gather resources - the technology, team, finance and market - to give birth to entrepreneurial businesses will be discussed.

The course is designed primarily for those who at some point of their career want to start their own ventures, or run their own family businesses. But it is equally useful to those who plan to work in or with new ventures either as venture capitalists, consultants to new firms or in new business development units of larger corporates.

#### **Topics**

- 1. The Early Career Dilemmas of an Entrepreneur
  - The Entrepreneur's Role, Task and Personality
  - A Typology of Entrepreneurs: Defining Survival and Success
  - Entrepreneurship as a Style of Management
  - The Entrepreneurial Venture and the Entrepreneurial Organisation
- 2. Choosing a Direction
  - Opportunity recognition and entry strategies: New product, Franchising, Partial Momentum, Sponsorship and Acquisition
  - The Strategic Window of Opportunity: Scanning, Positioning and Analysing
  - Intellectual Property: Creation and Protection
- 3. Opening the Window: Gaining Commitment
  - Gathering the Resources you don't have
  - The Business Plan as an Entrepreneurial Tool
  - Financial Projections: how to do them the right way
  - Debt, Venture Capital and other forms of Financing
  - Sources of External Support
  - Developing Entrepreneurial Marketing: Competencies, Networks and Frameworks
- 4. Closing the Window: Sustaining Competitiveness
  - Maintaining Competitive Advantage
  - The Changing Role of the Entrepreneur: Mid Career Dilemmas
  - Harvesting Strategies versus Go for Growth

## I.9 FIRMS, MARKETS AND GLOBAL DYNAMICS

[3 Credits]

#### **Objectives**

Findings from complexity science, a growing inter-disciplinary area, indicate that global business dynamics are among the most complex phenomena. Yet the management professional has an increasing need to anticipate the changing realities.

The elective's central quest is to facilitate richer intuitions into the non-linear logic of global dynamics, including the ongoing phenomenon of globalization, with the economic institutions, especially the firm, at the core. Global business dynamics, the course suggests, may be seen as the essence of global dynamics itself; especially since the industrial revolution.

The elective also seeks to deepen the enquiry into the firm, while bringing the other major economic institutions into the framework, viz., goods & services markets, financial markets, nation-states, and international organizations. The enquiry is multi-disciplinary, offering the participants an opportunity to integrate the functional areas towards a more holistic understanding of the evolving realities.

The other objectives of the elective are:

- To examine the complex dynamics of the principal economic institutions, viz., firms & markets.
- To examine the systemic forces which influence the drive towards globalization.
- To explore the rise and decline of nations, and civilizations.
- To make meaning of the non-linear tides in global business dynamics, and even global dynamics in general.
- To reckon the newer challenges and prospects for the management profession, as also for the individual professional, given the logic of global business dynamics.

- 1. Introduction
  - Basic ideas on chaos, complexity and complex dynamics;
  - The importance of domain insights, pattern cognition, and logic.
  - The principal institutions in a market economy, with firms at the core.
  - A working definition of globalization, beyond champions and dissidents; focus on the systemic/institutional/design issues. Certain preliminary patterns.
- 2. Visualizing the principal economic institutions through a quasi-mathematical model.
  - Positive feedback with system configuration change (PFSCC);
  - The explosive characteristic.
  - Industrial Revolution visualized through the PFSCC framework.
  - The centrality of the firm, and especially of a critical set of firms, in a market economy.
  - The resilient constraint and its iterative play; the relentless impetus to invent and innovate;
  - Schumpeter's creative destruction.
- 3. An idiosyncratic look at the evolution of the present world order through the complex dynamics of the major economic institutions, especially firms & markets.
  - The precursors to the present pattern of globalization.
  - The newer impetus since the 1970s;
  - The special case of the emerging economies.
  - A changing world order.
- 4. The increased importance of the management profession: the prospects and challenges.

## 1.10 INDUSTRIAL ECONOMICS AND COMPETITIVE STRATEGIES

## [3 Credits]

## **Objectives**

- To help gain an understanding of:
  - i) The structure conduct performance relationship in an industry.
  - ii) The factors influencing these
- To acquire the knowledge/skill to evolve competitive strategies and thereby determine the conduct of a firm in the market.

## **Topics**

- 1. Primer on economic concepts.
- 2. 'What' & 'Why' of Industrial Economics
  - S C P paradigm
- 3. The welfare economics of market power

#### **STRUCTURE**

- 4. Market structure its measures & determinants
- 5. Firm Boundaries Horizontal & Vertical
- 6. Concentration in markets seller & Buyer Concentration
- 7. Product Differentiation
- 8. Conditions of entry

### CONDUCT

- 9. Competition
- Competing via commitment
- Dynamics of Pricing rivalry
- Entry & exit strategies
- 10. Strategic Positioning & dynamics

## **PERFORMANCE**

11. Market Structure and performance - Overall appraisal.

## **PUBLIC POLICY & REGULATION**

- 12. Issues in Antitrust Economics
- 13. Issues in Regulatory Economics
- 14. The legal framework

## I.11 INTERNATIONAL BUSINESS ECONOMICS

## [3 Credits]

## **Objectives**

The broad focus of this course will be:

- To understand the important linkages between domestic economy and its external sector
- To gain the conceptual clarity of the theoretical aspects of international trade and finance
- To examine the broad pattern of changes in the international economic policy
- F To examine the business implications of international economic environment
- To identify the basic macroeconomic relationships as they affect the behaviour of firm
- F To incorporate international issues in designing corporate strategies in a fast changing environment.

- 1. International Monetary Systems
  - International Business Environment
  - International monetary System
  - European Monetary System and Emergence of Euro
- 2. Developing Countries' Concerns
  - Exchange Rate Policy of Developing Economies
  - India's Exchange Rate Regimes and Experiences
  - Nominal vs Real Exchange Rates, Bilateral vs Effective
  - Exchange Rates and the Economy
- 3. International Financial Flows
  - Emergence of International Financial Intermediation
  - Recent Changes in the International finance
  - Resource Flows to Developing Countries
- 4. Emerging Market Analysis
  - Country Risk Analysis
  - Foreign Investment Analysis: Direct and Portfolio
  - Currency Convertibility: Current Account and Capital Account
  - South Asian Currency Crisis
- 5. International Trade
  - Developments in International Trade Theory
  - Trade Policy Instruments and Liberalization
  - World Trade Organization
- 6. Legal Dimension in International Business

## I.12 MANAGING PRIVATE-PUBLIC PARTNERSHIPS

### [3 Credits]

## **Objectives**

With the advent of Privatization since the last two decades, Public Private Partnerships (PPP) have been a popular way of financing infrastructure projects especially in highway construction, power supply, telecommunications and even for social infrastructure such as education, training and social services. The objective of this course is to familiarize students with the various issues in Public Private Partnerships that they are likely to face once they join the industry.

## Topics

- 1. The Rationale for Public Private Partnerships.
- 2. Different Kinds of Public Private Partnerships with a special emphasis on the Build Operate and Transfer Model (BOT).
- 3. Issues in Regulation that come about with privatization.
- 4. Pricing mechanisms available to a regulator to ensure universal access and efficiency.
- 5. Discussion of the privatization experience in different sectors, water, electricity, telecommunication, and railways with a special emphasis on India.
- 6. Granting and negotiating infrastructure concessions to avoid renegotiations at a later date.
- 7. Tendering and Procurement Issues in a Public Private Partnership.
- 8. Project Finance and its application in Public Private Partnership.
- 9. Monitoring and Evaluation Methods in a Public Private Partnership.
- 10. Dispute Resolution in Public Private Partnerships.

## I.13 MONEY BANKING AND FINANCE

## [3 Credits]

## **Objectives**

The students should be able to:

- Comprehend the need, definition, functions and economic significance of financial institutions and markets
- Understand the interdependence between financial markets and interest rates
- © Comprehend the behavioral analysis of interest rates: risk, liquidity and term structure
- Identify the role played by the Central Bank and instruments of credit control
- Grasp the conduct of monetary policy and its effect on interest rate, credit availability, prices and inflation rate

## **Topics**

- 1. An Overview of the Financial System
  - Saving and Investment
  - Money, Inflation and Interest
  - Banking and Non Banking Financial Intermediaries
- 2. Financial Markets and Instruments
  - Money market and Capital Markets
  - Financial Instruments: REPO, TBs, Equities, Bonds, Derivatives, etc.
  - Characteristics of Financial Instruments: Liquidity, Maturity, Safety and Yield
- 3. Principles of Financial Markets and Interest Rates
  - Understanding Interest Rates
  - Risk and Term Structure of Interest Rates
  - Interdependence of Markets and Interest Rates
  - Rational Expectations and Efficient Markets
- 4. Economics of Banking (Depository) Institutions
  - Banking Institutions: Revenues, Costs and Profits
  - Basic Issues and Performance of Depository Institutions
  - Asymmetric Information and Banking Regulation
- 5. Central Banking, Monetary Policy and Regulation
  - The RBI as a Central Bank: Structure, Functions and Working
  - Reforms
  - The Current Regulatory Structure
- 6. Essentials of Monetary Theory
  - The Classical and Keynesian Theories of Money, Prices and Output
  - Rational Expectations and Modern Theories of Money and Income
- 7. Conduct of Monetary Policy and Interlinkages
  - Objectives and Targets of Monetary Policy
  - Policy Lags and Intermediate Targets
  - Rules Vs. Discretion in Monetary Policy
  - Interlinkages

## I.14 SOCIAL BANKING AND MICROFINANCE

[3 Credits]

#### **Objectives**

Access to financial services by a cross section of the society is recognized all over the world as one of the key requirements of inclusive socio-economic development. Social banking in India is perceived as a policy-induced orientation of banks and other financial institutions aimed at achieving financial inclusion and thereby attainment of the broadly accepted goals of the national development process.

Financing small economic operators and other excluded sections of the society, which constitutes the core of social banking, has been observed to face challenges like moral hazard, adverse selection, high transaction cost and information asymmetry. Financial sector reforms and prudential standards of accounting have thrown up fresh challenges to the task of social orientation in banking.

The course is designed to sensitize the students to the key issues linked to the whole discourse on social banking including the challenges inherent therein, in the particular context of India, and to familiarize them (the students) with the initiatives taken in the country for addressing the said issues. The course also seeks to underline how the tenets of social banking and inclusive financial system may not always be in conflict with the goal of maximizing the operating surplus of a 'commercial' entity like a banking institution. In this context reference is sought to be made to the evolution of the so called 'micro finance' initiative as a socially responsive and yet commercially viable proposition.

- 1. Study of the inherent challenges of financing small economic operators like moral hazard, adverse selection, high transaction cost and information asymmetry etc.
- 2. Examination of the working of an informal moneylender as a form of monopolistic competition
- 3. Justification of intervention in the financial market in the light of the need to achieve efficiency and distribution goals
- 4. Tracing the genesis and evolution of the process of institutionalization of financial services in India as a precursor to intervention in the financial market.
- 5. Composition of the Institutional Credit System (ICS) in India operating at the ground as well as apex levels; roles played by different constituents of ICS
- 6. Major policy initiatives launched in India for aligning the banking system to socio-economic goals of the national development process including the following:
  - (a) Evolution of the concept of *priority sector* in lending and stipulation of quantitative targets therefor;
  - (b) Nationalisation of major commercial banks; and
  - (c) Introduction of Lead Bank Scheme (LBS) followed by Service Area Approach (SAA), etc.
- 7. Outline of subsidy-linked credit programmes of the Government like PMRY, SGSY, SJSRY & SLRS, etc.
- 8. Initiatives of the Government (without subsidy-link) like *Kisan Credit Card* (KCC) scheme, *Financing of Agriclinics/Agribusiness Centres* etc. and the *Differential Rate of Interest (DRI)* scheme.
- 9. Overview of Lead Bank Scheme (LBS) and Service Area Approach (SAA) and the framework envisaged under LBS and SAA for achieving co-ordination at various levels-aimed at facilitating effective implementation of the social banking initiative. Reference in this context will be made to the functioning of forums of coordination like DCC, SC & DLRC at the district-level and SLBC at the State-level (all constituted under LBS) and BLBC (constituted under SAA).
- 10. Genesis and evolution of microfinance: different models of microfinance operating in India; study of the Self Help Group-Bank Linkage Programme (SBLP) as an innovative strategy of microfinance evolved in India.
- 11. Identification of major problems encountered in implementation of social banking initiative in India including, notably, (a) inter-spatial disparity manifested, among other things, by varying credit-deposit ratio (CDR) across areas, (b) inadequate linkage support and (c) unsatisfactory repayment climate etc. Search for solutions to the contextual problems and defining the roles of various stakeholders like the government, the non-government organizations (NGOs) and the civil society besides the constituents of institutional credit system (ICS) in achieving effective operation of the social banking initiative.

## I.15 STRATEGIC GAME THEORY FOR MANAGERS

### [3 Credits]

## **Objectives**

People rarely make decisions in a vacuum. The choices we make affect others, and their choices impact us. Such situations are known as "games" and "game-playing", while sounding himsical, is serious business. Managers frequently play "games" both within the firm with employees, ther stake-holders, other divisions etc. as well as outside the firm with competitors, customers and egulators! The goal of this course is to enhance your ability to think strategically in complex, interactive environments. Knowledge of game theory will give you an advantage in such strategic settings.

Internationally, a lot of integration is taking place between decision theory, particularly applied game theory, and business strategy. On one hand, applied game theorists are trying to draw on real life management practices to develop newer and more relevant theories. On the other hand, strategists are coming to depend on game theory to provide a general framework for organizing the otherwise incoherent mass of facts available to them. In this context, the current course seeks to provide the students with an introduction to the interface between game theory and strategy.

#### **Topics**

- 1. Games of complete information
  - Simultaneous move games and Nash equilibrium
  - Pure strategy vis-à-vis mixed strategy
  - Sequential move games and sub-game perfect Nash equilibrium
  - Repeated games
  - Commitment and Strategic Moves Credibility, threats, and promises as ways to change the game being played.
  - Evolutionary games.

## Applications:

- Static and Dynamic games of Price and non-price competition
- Commitment strategies
- Entry and exit decisions and entry deterrence strategies
- Pricing strategies, capacity commitment
- War of attrition
- Co-ordination games
- Reputation formation
- Bank runs
- Bargaining and Tournament games
- Collective-action games.
- 2. Games of incomplete information
  - Static games of incomplete information and Bayesian Nash equilibrium
  - Dynamic games of incomplete information and Perfect Bayesian equilibrium
  - Signaling games.

## Applications:

- Brinkmanship
- · Reputation and strategic irrationality
- Auctions
- Contracts
- Adverse selection and moral hazard in capital, labor and insurance markets (e.g., takeovers, wage contracts, insurance contracts)
- Job market signaling.

### I.16 TIME SERIES ANALYSIS

[1.5 Credits]

## **Objectives**

Analysis of financial and time series data has received substantial attention in today's business. A thorough understanding of the applied times series analysis/econometrics is essential for modelling, analysing and predicting the behaviour of such variables. Due to growing importance and relevance of applied time series econometrics in finance and other related fields, the course is designed to help the students to understand the concepts, methods, applications and usefulness of time series analysis to various problems relating to marketing, finance and other avenues of business. Practical examples from the industry and economy are the hall mark of the course combine with laboratory experiments with latest software application. For practical purpose, the course is extremely useful for management professional working in different firms with various capacities in decisions making.

- 1. Introduction to Time Series Analysis
  - Nature of time series data, difference equations,
  - Stochastic process: Stationary versus Non-stationary Stochastic Process
  - Tests of Stationarity: Correlogram, Unit Root Tests, Random Walk Models.
- 2. Multivariate Times Series Analysis
  - Vector Autoregression Model (VAR): Estimation and Identification,
  - Variance decomposition and Impulse response functions,
  - Causality applying Granger Causality Tests and VAR model,
  - Forecasting using a VAR model.
- 3. Modeling Short Run and Long Run Relationships
  - Cointegration: Cointegration and common trends,
  - Tests of cointegration: Engle-Granger Two Step Procedure, the Johansen-Juselius Multivariate Test.
  - Error Correction Models:- Estimation and interpretation off an Error Correction Model
  - Forecasting Using an Error Correction Model
- 4. Modeling Volatility:
  - Time varying volatility model: ARCH, GARCH models and its extension
  - Forecasting volatility and Other Volatility models
- 5. Modeling Non-linear Time Series
  - Simple nonlinear models
  - Threshold Autoregressive Model (TAR), The Smooth Transition Autoregressive (STAR) model etc.
  - Nonlinearity Tests etc.

## II FINANCE

### II.1 FINANCIAL MANAGEMENT - I

## [3 Credits]

## **Objectives**

This course aims at:

- Familiarising the students with the financial environment of business, especially the financial markets
- Imbibing knowledge about the decisions and decision variables involved in building the liability side of balance sheet of the firm
- Developing the analytical skills by associating the tools and techniques with the situation
- Developing skills for interpretation business information and application of financial theory in financing related decisions

- 1. Financial Environment of Business (with special emphasis on India)
  - General financial environment
  - Introduction to Financial Markets
    - Capital Markets
    - Primary Market
    - Basics of capital market mechanism,
      - instruments,
      - · financing and rating institutions, and
      - legal environment related to this.
    - Secondary Market
    - Basics of
- stock exchanges and their role,
- regulatory framework, and
- · transactions on stock exchange
- Money Markets
- Basics of
- money market mechanism,
- · instruments,
- institutions, and
- legal environment related to this.
- 2. Corporate Financial Objectives and Functions
- 3. Financial Analysis
  - Ratio analysis (liquidity ratios, profitability ratios, turnover ratios, structural ratios, etc.)
    - o Comparative balance sheet
    - o Common size statement analysis
    - o Trend analysis
    - o Sickness prediction
  - Funds Flow analysis
- 4. Risk and Return Portfolio Theory
- 5. Sources of Funds (including regulatory framework)
  - Types of securities
  - Issuing the capital in market
  - Pricing of issue

- Valuation of Stocks and bonds
- 6. Dividend policy and issue of bonus shares
- 7. Capital Structure Decision
  - Modigliani-Millar proposition I and II
  - Capital structure theories
  - Interface with cost of capital

## II.2 FINANCIAL MANAGEMENT - II

## [3 Credits]

## **Objectives**

This course aims at:

- Familiarising the students with the valuation of firm
- F Imbibing knowledge about the decisions and decision variables involved in building the asset side of balance sheet of the firm
- Developing the analytical skills by associating the tools and techniques with the situation
- Developing skills for interpretation business information and application of financial theory in corporate investment decisions, with special emphasis on working capital management.

- 1. Valuation of the Firm
- 2. Calculating Cost of Capital
  - Calculating Cost of Specific Funds
  - Calculating Weighted Average Cost of Capital
- 3. Corporate Investment Decisions
  - Introduction
  - Cash Flow Projection
  - Evaluation Techniques
- 4. Evaluation of Lease Contracts
- 5. Corporate Restructuring
  - Mergers and Acquisitions
    - Types of Mergers
    - o Evaluation of Merger Proposal
  - Take-over
  - Amalgamation
  - Leverage buy-out
  - Management buy-out
- 6. Financial Restructuring
  - Share Split
  - Consolidation
  - Cancellation of Paid-up Capital
  - Other Mechanisms
- 7. Corporate Failure and Liquidation
- 8. Working Capital Management

- Working Capital Planning
- Monitoring and Control of Working Capital
- Working Capital Financing
- Managing the Components of Working Capital
  - Cash Management
  - Receivable Management
  - Inventory Management

#### II.3 MANAGEMENT ACCOUNTING-I

#### [3 Credits]

#### **Objectives**

- To familiarise the students with financial statements and principles underlying them and to develop their skills in reading Annual Reports.
- To acquaint them in brief with accounting mechanics, process and system, but emphasis is laid on sound concepts and their managerial implications.
- To lay a foundation for developing their skills in interpreting financial statements.

- 1. Understanding Financial Statements (An Overview)
- 2. Interpreting Financial Statements (An Overview)
- 3. Accounting Mechanics, Process and System
  - Introducing Book Keeping and Record Maintenance
  - The concept of double entry and fundamental principles
  - Journal
  - Ledger
  - Trial Balance
  - Cash Book
  - Subsidiary Books
  - Bank Reconciliation Statement
  - Rectification of Errors
  - Final Accounts
  - Extended Trial Balance to Final Accounts
  - Final Accounts from Incomplete Records
- 4. Significant Accounting Policies, Accounting Standards
- 5. Certain Special Features of Corporate Accounting
- 6. Form and Contents of Financial Statements and Interfaces with Companies Act
- 7. Creative Accounting and Implications thereof
- 8. Analysing and Interpreting Financial Statements
- 9. Cash Flow and Fund Flow Techniques

## II.4 MANAGEMENT ACCOUNTING-II

### [3 Credits]

## **Objectives**

- To familiarise the students with cost records / statements and principles underlying them and to develop their skills in understanding and appreciating cost information.
- To acquaint them in brief with cost and management accounting mechanics, process and system, but emphasis is laid on sound concepts and their managerial implications.
- F To develop an appreciation about the utility of cost information as a vital input for management information and decision making process.

#### **Topics**

- 1. Introduction to Cost and Management Accounting
- 2. Treatment of Overheads
- 3. Unit Costing (Cost Sheet)
- 4. Joint Product, By Products and Contract Costing
- 5. Process Costing
- 6. Maintenance of Cost Records, Cost Finance Reconciliation
- 7. Absorption Costing, Marginal Costing, Cost Volume Profit Analysis and Decision Making
- 8. Relevant Cost and Differential Cost
- 9. Budgetary Controls
- 10. Standard Costing
- 11. Inventory Management and Cost Audit (An Overview)
- 12. Activity Based Costing
- 13. Application of Costing concepts in the Service and Trading Sector

#### II.5 BEHAVIOURAL FINANCE

## [1.5 Credits]

### **Objectives**

- To help students appreciate the limitations of 'rational' models of investment decision making
- To introduce students to an alternate framework for understanding price discovery in the markets
- To help students identify persistent or systematic behavioral factors that influence investment behavior

- 1. Investment Decision Cycle: Judgment under Uncertainty
- 2. Utility/ Preference Functions: Expected Utility Theory [EUT]
- 3. Brief History of Rational Thought: Pascal-Fermat to Friedman-Savage
- 4. Paradoxes (Allais and Others)
- 5. Prospect Theory

- 6. Information Screening Biases
- 7. Information Processing: Bayesian Decision Making, Heuristics and cognitive biases
- 8. Forecasting Biases
- 9. Emotion and Neuroscience
- 10. Group Behavior: Conformism, herding, fatal attractions
- 11. Investing Styles and Behavioral Finance

## II.6 BUSINESS ANALYSIS AND VALUATION

#### [3 Credits]

## **Objectives**

This course will have all the elements that would go into reviewing a potential investment opportunity. It is not a detailed course in one category, such as financial accounting, but it ties business strategy analysis, financial analysis, forecasting analysis, and valuation analysis together. This course takes the path to evaluating the opportunity to its fullest after one has gone through basics of strategy, finance, and accounting.

- Career Focus It is aimed at students who expect at some point in their careers to evaluate the performance, prospects, and value of a business.
- F Educational Objectives The objective of the course is to provide hands-on experience in valuation especially using financial analysis.

- 1. Financial Statement of Analysis
- 2. Statement of Cash Flows
- 3. Approaches to Valuation & Identifying Value Drivers
- 4. Approaches to Valuation & Identifying Value Drivers
- 5. Estimating the Discount Rates, Growth Rates, and Cash Flows
- 6. Dividend Discount Models
- 7. FCFE Models
- 8. FCFF Models
- 9. Valuation Using Multiples
- 10. Strategy-Finance-Valuation Trilogy
- 11. Real Options & Brand Valuation
- 12. Which is the appropriate method to use?
- 13. Identifying frequently made errors in Valuation

## II.7 CAPITAL EXPENDITURE PLANNING AND CONTROL

[3 Credits]

#### **Objectives**

- To provide necessary inputs to the students in form of concepts, theories and financial management techniques related to capital expenditure / investment decisions.
- To aid the students in developing an integrated approach to capital expenditure decision-making process primarily emphasising on sound concepts and their managerial implications.
- To focus heavily on the practical and strategy aspects of capital expenditure decisions which will equip the students to apply their skills and knowledge effectively in the future while dealing with capital expenditure decisions.
- To enrich the learning process through exposure to real life cases / business situations and live projects.

## **Topics**

- 1. The fundamentals of Capital Budgeting (A recapitulation)
- 2. The fundamentals of Cost of Capital and Capital Structuring (A recapitulation)
- 3. Market Demand Forecasting Techniques
- 4. Financial Forecasting (emphasising on cash flow forecasts)
- 5. Simple Risk Management Techniques in CAPEX Decision Making Process
- 6. Leasing
- 7. Interfaces with relevant Accounting Standards
- 8. Interfaces with Excise Laws and Companies Act
- 9. Interfaces with Income Tax Act
- 10. Project Financing and other miscellaneous topics
- 11. Sickness Prediction and Distress Restructuring
- 12. Advanced Risk Management Techniques in CAPEX Decision Making Process
- 13 Securitisation (A practical insight)

## II.8 COMMERCIAL BANKING

#### [3 Credits]

#### **Objectives**

- Providing an in-depth analysis of the commercial banking in the liberalised Indian economy
- Familiarising the students with the regulating framework for banks in India
- Equipping the students with the tools used in interpreting and evaluating performance, productivity and efficiency of the banking organisations
- F Equipping the students with the in depth knowledge of financial management in the banking organisations
- Familiarising the students with the new banking practices and processes

#### **Topics**

- 1. Indian Financial System: An Overview
- 2. Indian Banking System
  - Banking Structure in India
  - Evaluation of the Banking System and Future Trends
- 3. Analysis of the Banking Structure and Performance Measurement
  - Interpreting Bank Balance Sheet and Income Expenditure Statements
  - Financial Statement Analysis and Bank Performance Measurement
    - o CAR, NPA, Liquidity Ratios, Structural Ratios and Profitability Ratios
- 4. Banking Regulations
  - Control of the Banking Sector by the RBI
    - o CRR, SLR, CRAR and Income Recognition Norms, Provision for NPAs
- 5. Management of Banking Organisation
  - Loan Management
  - Investment Management
  - Liquidity Management
  - Profit and Growth Management
  - Asset Liability Management Using traditional GAP and Modern Techniques
- 6. Mergers and Acquisition, Bancassurance and Universal Banking
  - Opportunity for Strengthening the Banking Organisation
- 7. Financial Innovations and Opportunities for Banks
  - Factoring, Securitisation and Take Out Finance
- 8. Technological Innovations and Opportunities for Banks
- 9. International Banking
  - Organisational Structure, Activities and Regulation

## II.9 COMMODITIES DERIVATIVES MARKET

#### [3 Credits]

#### **Objectives**

The aim of the course is to equip young managers with the knowledge of emerging commodities derivatives trading practices in India. The commodities markets design and rules in India will be focused. Further, the regulatory framework of these markets and domestic and international historical developments in commodities market will also be highlighted. A clear distinguishing from commodities from securities market and need for separate domain knowledge will be explained. Spot price anomalies and efforts of the commodities exchanges in resolving the issue will also be discussed. Importance of hedgers, speculators and arbitragers will be presented. Commodity indices as a investment class and how they fulfill the need of investors will be elaborated.

- 1. Historical changes and growth of global and domestic Commodities derivatives markets
- 2. FCR Act 1952 and Regulatory structure of Commodities Derivatives Markets in India
- 3. Issues in Agricultural Commodities Markets
- 4. Issues in Non-Agricultural Commodities Markets
- 5. Commodities Derivative Exchanges and design of the markets

- 6. Issues Related to Product Design and contract specifications
- 7. Issues related to Spot price and present practices of commodities exchanges
- 8. Clearing House operations and Risk Management Procedures
- 9. Delivery Related Issues like delivery centers, deliverable varieties, assying
- 10. Issues related to monetering and surveillance by Exchanges and Regulator
- 11. Role of intermediaries in Commodities Markets
- 12. Basis Risk and its importance in pricing
- 13. Agricultural Commodity Futures trading pattern in Exchange Case study
- 14. Non- Agricultural Commodity Futures trading pattern in Exchange Case study
- 15. International commodity indicies and as a investment tool for investors
- 16. Commodity Options on Futures and its mechanism
- 17. Internationally traded Commodities based ETFs
- 18. Commodities as a New Asset Class
- 19. Essential Commodities Act and role of state governments
- 20. Warehousing Act Bill and its implications

## II.10 CORPORATE TAXATION

#### [3 Credits]

## **Objectives**

- To acquaint the participants with basic principles underlying the provisions of direct and indirect tax laws and to develop a broad understanding of the tax laws and accepted tax practices.
- To introduce practical aspects of tax planning as an important managerial decision-making process.
- To expose the participants to real life situations involving taxation and to equip them with techniques for taking tax-sensitive decisions.
- To update the participants on current topics/debatable issues involving direct and indirect taxation.

- 1. Direct Tax
  - Income Tax Act and rules
- 2. Indirect Taxes
  - Central Excise and CENVAT
  - Customs Duty
  - Service Tax
  - Central Sales Tax and VAT
  - Primer on GST

## II.11 FINANCIAL ANALYSIS, PLANNING AND CONTROL

## [3 Credits]

## **Objectives**

- To provide necessary inputs to the students in form of "Advanced Management Accounting" techniques. However, emphasis is laid on sound concepts and their managerial implications.
- To focus heavily on the practical and strategy aspects of "Advanced Management Accounting" which will equip the students to apply their skills and knowledge effectively in the future while dealing with real life business problems / situations.
- To develop an appreciation about the utility and applicability of "Advanced Management Accounting Techniques" as an essential and integral component of management information for the purpose of the entire financial decision making process.
- To enrich the learning process through exposure to real life cases / business situations and live projects.

#### **Topics**

- 1. Financial Analysis applying Advanced Management Accounting Techniques.
- 2. Accounting Standards and their implications. (AS 14 onwards).
- 3. A thorough comparative study of US GAAP, UK GAAP and Indian GAAP
- 4. Creative Accounting and World Wide Accounting Scandals and implications thereof
- 5. Critical Evaluation of Sample Annual Reports
- 6. Accounting for Amalgamation
- 7. Consolidation
- 8. Short Term Decision Making and Pricing Decisions Applying Management Accounting.
- 9. Strategic Profitability Analysis
- 10. Working Capital Estimation
- 11. Advanced Cash Management Techniques
- 12. Advanced Techniques for Management of Receivables.

## II.12 FINANCIAL DECISION MAKING UNDER INFORMATION ASYMMETRIES

[1.5 Credits]

## Objectives:

It is widely accepted that most financial decisions are rarely made in scenarios where full information relevant to the decision is available to all decision makers, an assumption of standard models dealing with economic decision making in general and financial decision making in particular. The study of financial decision making in the presence of information asymmetries and incomplete information attempts to bridge the gap between existing financial decision making models and real-life decision scenarios. The primary objective of this course is to equip students with an intermediate to advanced understanding of some applications of decision models in making financial decisions in the presence of the information asymmetry problem, a field that has rapidly grown over the past three decades. By the end of the course, students are expected to be equipped with a broader range of analytical tools for enhancing their understanding of financial decisions taken under the presence of information asymmetries.

#### Pedagogy:

It is primarily a concept based course. However, we will use cases and examples to motivate the concepts and to provide a richer understanding. After a concept is introduced, cases and real life examples of corporate financial decisions will be used to illustrate the application of the concepts and models.

#### Topics:

- Debt as a Signaling Mechanism: The Role of Maturity and Collateral Choices
- Credit Rationing & Sorting Equilibria in Debt Markets
- Capital Structure Choices and Credible Signaling in Repeated Games
- Financial Market Panics as Self-Fulfilling Equilibria
- Optimal Information Disclosure in the Presence of Agency Costs
- The Agency Problem & Optimal Security Design

## II.13 FINANCIAL MARKETS

## [3 Credits]

## **Objectives**

The course aims at:

- Familiarising the students with the Indian capital market, its operations, instruments, regulations etc.
- Helping students in acquiring analytical skills in the market analysis in the context of raising medium and long term funds
- Familiarising the students with the operations of secondary market mechanism
- Developing an appreciation among the students for the interfaces among government policies, capital market, investors and firms

- 1. Financial Markets
  - Introduction
  - Government Economic Philosophy and Financial Market
  - Structure of Financial Market in India
- 2. Capital Market
  - Capital Market Theory
    - Introduction, Concept, Role, Importance, Evolution in India, etc.
    - Critical Evaluation of the Development
    - Future Trends
  - Primary Market System and Regulations in India
    - Types of firm's Interface with Investors
    - Types of Scripts
    - Issue of Capital: Process, Regulations, Legalities, Pricing of Issue, Methods of Issue, Book-building, Road-show, Intermediaries in Issue Management
    - Managing Shareholder Relations
    - Primary Market Intermediaries: Commercial Banks, Development Banks, Custodians, Merchant Bankers, Issue Managers, Rating Agencies, etc.
  - Secondary Market System and Regulations in India
    - O Stock Exchanges in India: History and development and importance

- o Listing of Scripts
- o On-line Trading
- O Depositories: Growth, Development, Regulation, Mechanism
- OTC Exchange
- Stock Exchange Mechanism: Trading, Settlement, Risk Management, Investor Grievances, Basics of Pricing Mechanism, Carry Forward, Badala, Automated Lending and Borrowing Mechanism
- o Inside Trading, Circular Trading, Price Rigging, etc.
- Players on Stock Exchange: Investors, Speculators, Market Makers, Bulls, Bears, Stags
- Stock Exchange Regulations
- o Stock Exchange Board
- Stock Indices
- Role of FIIs, MFs and Investment Bankers
- Regulations and Regulatory Agencies (Primarily SEBI)
  - o For Primary Markets
  - o For Secondary Markets

## 3. Other Topics

- Bond Market in India: Government Bond Market and its Interface with Capital Market
- Debt Market in India
- Interface between
  - O Stock Market and Bond Market
  - o Primary and Secondary Markets
  - o Capital Market and Money Market
- Mutual Fund: Concept, Mechanism, Role, etc.

## II.14 FINANCIAL MODELING USING EXCEL

#### [3 Credits]

#### **Objectives**

Modeling techniques for accurate financial forecasting are used in many areas of finance, such as derivatives, valuation, project evaluation, deal structuring, portfolio management and the like. In the course, the participants will learn the model building skills required to build powerful models in finance with the help of excel. There are many features of model building that are common irrespective of the final model that one intends to build. In the course we will also emphasise on the different model building skills that one should have irrespective of the final use that one is going to make of it.

By the end of the course the participants should be better able to:

- Understand the basic and advanced features of excel
- Understand how to build models in excel to suit one's purpose
- Building models in different areas of finance including investments, corporate finance and derivatives
- Identifying and controlling the key sensitivities with advanced spreadsheet simulation
- Understand how risk can be built into the model to enhance decision making process

- 1. Understanding the Basic Features of Excel
  - Introduction to Modeling
  - Introduction to Excel
- 2. Understanding Advanced Features of Excel
  - Database Functions in Excel
  - Creating Charts
  - Using Forms and Control Toolbox
  - Understanding Finance Functions present in Excel
  - Creating Dynamic Models
- 3. Sensitivity Analysis using Excel
  - Scenario Manager
  - Other Sensitivity Analysis Features
- 4. Simulation using Excel
  - Different Statistical Distributions used in Simulation
  - Generating Random Numbers that follow a particular distribution
  - Building Models in Finance using Simulation
- 5. Excel in Accounting
  - Preparing common size statements directly from Trial Balance
  - Forecasting Financial Statements using Excel
  - Analysing Financial Statements by using Spreadsheet Model
- 6. Excel in Project Appraisal
  - Determining Project Viability
  - Risk Analysis in Project Appraisal
  - Simulation in Project Appraisal
- 7. Excel in Valuation
  - Determination of Value Drivers
  - DCF Valuation
  - Risk Analysis in Valuation
- 8. Excel in Portfolio Theory
  - Determining Efficient Portfolio
  - Creating Dynamic Portfolios
  - Portfolio Insurance
  - Fixed Income Portfolio Management using Excel
- 9. Excel in Derivatives
  - Black and Scholes Model in Excel
  - Greeks in Excel
  - Real Options Valuation
- 10. Building a Mega Model
- 11. Understanding Subroutines and Functions and building simple financial models using subroutines and functions
  - Recording and Editing Macros
  - Subroutines and Functions
  - Decision Rules
  - Message Box and Input Box
  - Debugging

- 12. Designing Advanced Financial Models using VBA
  - User Forms
  - Other Advanced Features
  - Actual Model Building

### II.15 FINANCIAL RISK MANAGEMENT

### [3 Credits]

### **Objectives**

- Define different types of market risks
  - o (FX risk, interest rate risk, equity risk as well as credit risk)
- Measure volatility in market prices
- Measure Value-at-Risk and its implications
- Statistically measure risk & analyze applications
- Application of VaR in managing risks & margining
- Risk Management issues in investments
- Lessons from some financial disasters

- 1. Financial Risk: An Overview, Evolution, and the Environment
- 2. Risks definition (market, credit, liquidity, operational), more specifically on the identification of different forms of risk (currency, interest rate, equity, commodity)
- 3. Market Data Analysis, Probability and distributions of asset prices, measuring return and risk, Modeling Risk Factors, Using implied volatility in Value-at-Risk measures
- 4. Risk and volatility Measurement, the issue of time aggregation, different measures of volatility such as EWMA, ARCH & GARCH processes, volatility clusters and the issue of time varying volatility
- 5. Measuring risk using Value-at-Risk, concept and computation of Var using variance-covariance approach, Calculating portfolio risk of more than one assets.
- 6. Historical simulation & multifactor Var, marginal and relative var, expected shortfalls, treasury applications
- 7. Stress testing and back-testing, Forecasting correlation & Volatility during market crash, Extreme Value Theory Basic Principles, Extreme Value Theory methods in measuring financial risk
- 8. Monte Carlo simulation, issues in generating price process (Brownian Motion, Ito Process), Cholesky decomposition in computing multi-asset VaR.
- 9. Risk & Forecasting issues in asset prices (exchange rates & interest rates), modeling interest rates such as Cox-Ingersoll-Ross Models, ARMA processes in generating currency forecasts and using in decision making.
- 10. Currency risk analysis in global investing, interest rate parity (covered and uncovered), yen-carry trade syndrome, risk environment in Indian forex markets, forwards and non-deliverable forwards, cross-currency risk analysis.
- 11. Value at risk for fixed income portfolio, cashflows mapping in fixed income portfolios, relation of Var measures with duration, comparing with yield vs price volatility, etc.

- 12. Credit Risk Basics: Probability of Default, Credit ratings & Transition Matrix analysis, Contingent claim approach and the KMV Model, Credit Risk Management and Credit VaR.
- 13. Indian environment in VaR applications (NSE, BSE, NCDEX, CCIL), RBI guidelines for credit & market risk management, VaR based margining
- 14. Case Discussions (Asia Currency Crisis , Amaranth Hedge funds, Allied Irish Bank Bank of Credit and Commerce International (BCCI), ERM Crisis, Orange County, Barings, Daiwa, Kidder Peabody, Metallgesellschaft, Northern Rock, Procter and Gamble (P&G), US Savings & Loan Crisis, etc)
- 15. An Integrated Risk Management framework, Operational, An integrated approach to risk management considering issues such as operational, supervisory, legal, Accounting, Issue of Governance ratings and risk in institutions, the role of risk management offices (front, middle and back offices), Risk reporting, Risk Budgeting and Setting Risk Limits, limits using notional, stop loss and Var based limits, establishing trading limits.

# II.16 FINANCIAL TECHNICAL ANALYSIS AND INTRODUCTION TO GLOBAL INTERMARKET ANALYSIS

[1.5 Credits]

## **Objectives**

The main objective of this course would be to facilitate the understanding of graduate students of Finance of the diverse Financial Technical Frameworks and Tools applicable to the Indian and Global Financial Markets, with a greater thrust on Global Inter-Market Analysis. The course is modeled to provide would-be managers with the right balance of Financial Technical Analysis Theory and it's applicability to the Indian and Global Financial Markets using real-life charts. In the course, the participants will learn sophisticated quantitative and analytical skills and charting techniques to better analyze various financial markets such as equities, bonds, commodities and currencies. A special emphasis would be placed on Indian Equities Markets and Commodities Markets through Real-time Charting Techniques.

In the wake of increasing Globalization of Financial Markets worldwide, the course would undoubtedly render the students capable of making better and more informed decisions in the realm of Investment Analysis, Asset Allocation and Hedging Mechanism.

By the end of the course the participants should be better able to:

- Understand the philosophy and rationale of the Financial Technical Analysis approach
- Understand the underpinnings of important theories and frameworks in Financial Technical Analysis
- Identify, interpret and analyze the varied financial technical patterns and indicators presented on the real-life stock charts.
- Understand the important inter-linkages between global financial markets including equities, bonds, commodities, currencies and their underlying futures markets

- A. FINANCIAL TECHNICAL ANALYSIS
- 1. Introduction to Financial Technical Analysis
  - Philosophy & Rationale of Technical Approach to Investing
  - Flexibility and Adaptability of Technical Analysis
  - Technical Analysis Applied to Different Trading Mediums and Time Dimensions

- 2. The Dow Theory
  - Introduction
  - · Basic Tenets of Dow Theory
  - The Forerunner of All Technical Theories
  - Characteristic Phases of Bull and Bear Trends
  - Stocks as Economic Indicators
  - Critical Appraisal of Dow Theory
- 3. The Japanese Candlestick Theory
  - Introduction to Japanese Candlestick Charting Techniques
  - Candlestick Construction & Analysis
  - Major Candlestick Reversal and Continuation Patterns
  - The Rule of Multiple Technical Techniques
- 4. The Basic Concepts of Trend
  - Definition of Trend
  - Trend has Three Directions
  - Trend has Three classifications
  - Trendlines Support and Resistance
  - Definition of Support and Resistance Levels
  - How They Reverse Their Roles
  - Reasons for Support / Resistance Phenomena
  - Tests for Determining Potential
  - Importance of Volume
- 5. The Major Reversal Patterns
  - Introduction
  - Price Patterns
  - Two Types of Patterns
  - Reversal and Continuation
  - The Head and Shoulders Reversal Pattern
  - The Importance of Volume
  - Finding a Price Objective
  - The Inverse Head and Shoulders
  - Double and Triple Tops and Bottoms
  - Saucers and Spikes
  - How Insiders Distribute
  - Volume Characteristics
- 6. The Major Continuation Patterns
  - Introduction
  - Triangles
    - o The Symmetrical Triangle
    - o The Ascending Triangle
    - o The Descending Triangle
  - The Broadening Formation Flags and Pennants
    - o The Wedge Formation
    - o The Rectangle Formation
    - o The Measuring Formula
- 7. Price Gaps
  - Their Significance
  - Various Kinds of Gaps
  - Breakaway Gaps, Continuation or Runaway Gaps
  - Measuring Implications
  - Exhaustion Gaps
  - Island Reversals
- 8. The Moving Averages
  - The Technical Oscillators

- The Stock Market Indicators
- Volume and Breadth Indicators as crucial determinants of the Overall Health of a Particular Stock Market
- Measuring Market Breadth
- The Advance
- Decline Line
- AD Divergence
- New Highs Versus New Lows
- New High
- New Low Index
  - o Upside Versus Downside Volume
  - o The Arms Index

#### B. GLOBAL INTERMARKET ANALYSIS

- 1. The Study of International Financial Markets
  - A New Dimension in Technical Analysis
  - Interlinkage of Various Financial Markets like Currencies, Bonds, Commodities, Equities across the Globe
  - Global Inter-Market Analysis with the help of Technical Analysis
- 2. Understanding the Business Cycle through Global Inter-Market Analysis
  - The Impact of the Business Cycle on Various Market Sectors
  - The Six Stages of Business Cycle
  - Stovall's Diagram to Describe a Complete Economic Cycle

# II.17 FIXED INCOME SECURITIES

# [3 Credits]

#### **Objectives**

This course is intended to analyze the fixed income securities markets and its implications for investments. It will analyze the market characteristics, instruments, selling techniques, pricing and valuation issues, floating rate instruments, relations with money market instruments, risk and return of fixed income securities, portfolio management techniques, term structure modeling, bond indexing, corporate debt and convertibles, bonds with embedded options, municipal bonds markets, corporate bonds & credit risk analysis, interest rate risk management with swaps, options and futures, bond management & trading. The course intends to cover the specific features of the Indian Fixed Income Securities Markets.

The course will construct several Excel based techniques to analyze bond valuation, term structure, portfolio statistics and risk mapping

- Fixed Income Markets, Institutional Arrangements, Market Participants and Instruments, Investors Perspectives, & Market Conventions, features of a government securities market
- 2. Bond Valuation, Time Value of Money, Price and Yield Conventions, Bond Valuation under flat term structure, Yield & return, & horizon return
- 3. Valuation of other Bonds, Floating Rate securities, index bonds, illiquid bonds
- 4. Understanding market linkages, bonds and money market instruments, MIFOR Curve
- 5. Risk Identification in Bonds: Duration, Convexity, and Immunization
- 6. Risk measurement in fixed income securities using value at risk

- 7. Corporate Debt, Valuation, valuation of convertibles
- 8. Yield Curve Analysis: Par Value, Zero, Spot Curve, Bootstrapping, spot & forward rates, (Nelson-Seigel model of the Indian NSE)
- 9. STRIPS, Theories of Term Structure of Interest Rates, Term structure and the economy
- 10. Treasury Securities Auction, Market Implications, When-Issued markets
- 11. Government securities auction & Bidding, Uniform vs discriminatory auction, bidding behavior, winners curse analysis
- 12. Auction Game: students run a game in groups, with bidding an upcoming auction, using real time market prices, and finalist selected based on their success, performance in WI trade
- 13. Bond Indexing, methodology for constructing a bond index, index return comparison
- 14. Portfolio construction, setting portfolio objectives, interpreting portfolio parameters, Passive vs Active portfolio management strategies, bullet vs barbell, other strategies.
- 15. Global Bond Markets, foreign currency bonds, dual currency bonds, analysis of global bond spread behavior in recent times.
- 16. Fixed Income Derivative Markets: FRAs, Interest rate Swaps, swap pricing and swap curve
- 17. Fixed Income Derivative Markets: Interest rate futures
- 18. Fixed Income Derivative Markets: Interest Rate Options, Caps & Floors pricing
- 19. Advanced Term Structure Modelling (Cox-Ingersoll-Ross, Vasicek)
- 20. Black-Derman-Toy (BDT) model representing binomial tree model of valuation of bonds with embedded options
- 21. Markets for Asset Backed Securities, Prime and Subprime Mortgage-Backed Securities
- 22. Fixed Income Investing: An Analysis & Strategies, Summary of learning experience

# II.18 Indian Accounting Standards (Ind AS) [1.5 CREDITS]

# **Objectives**

Accounting Rules the world over is undergoing (rather undergone) some major changes and the Accounting Standards (currently in force in the Indian soil) would be re-drafted in order to align (rather converge) those with International Accounting Standards / IFRS.

In that connection the Institute of Chartered Accountants of India (ICAI) has already re-drafted the entire set of Accounting Standards which would be launched shortly under the title "Ind AS". Status of these "Ind AS" is as under (quoting from the official website of ICAI).

#### Quote

The Indian Accounting Standards (Ind ASs) are in near final stage meaning that these had already been finalized by the Council of ICAI and sent to the National Advisory Committee on

Accounting Standards (NACAS). These are subject to any changes, which may be made by the Government before their notification.

#### Unquote

The objective of this course is to introduce the Ind AS (which would be governing and monitoring the entire financial reporting process) to the XLRI BM Students specifically focusing on their purpose, importance, utility and managerial implications.

## **Important Note**

Currently, ICAI has issued 35 Ind AS out of which a few are highly specialized by their very nature (e.g. Ind AS 20 on Government Grants, Ind AS 31 on Interests in Joint Ventures etc). This course (being of 1.5 credit only), would essentially cover 18 Ind AS (9 Sessions \* 2 Ind AS per session) which ALL finance managers would be expected to be aware of. In a session of 90 minutes duration more than 2 Ind AS cannot be covered because it may prove to be too heavy for participating students. In case this course gets expanded to a 3-credit elective course at a later date, the remaining set of Ind AS may also be covered in this course.

# II.19 INTERNATIONAL BUSINESS ECONOMICS

[3 Credits]

# **Objectives**

The broad focus of this course will be:

- To understand the important linkages between domestic economy and its external sector
- To gain the conceptual clarity of the theoretical aspects of international trade and finance
- To examine the broad pattern of changes in the international economic policy
- To examine the business implications of international economic environment
- To identify the basic macroeconomic relationships as they affect the behaviour of firm
- To incorporate international issues in designing corporate strategies in a fast changing environment.

- 1. International Monetary Systems
  - International Business Environment
  - International monetary System
  - European Monetary System and Emergence of Euro
- 2. Developing Countries' Concerns
  - Exchange Rate Policy of Developing Economies
  - India's Exchange Rate Regimes and Experiences
  - Nominal vs Real Exchange Rates, Bilateral vs Effective
  - Exchange Rates and the Economy
- 3. International Financial Flows
  - Emergence of International Financial Intermediation
  - Recent Changes in the International finance
  - Resource Flows to Developing Countries

- 4. Emerging Market Analysis
  - Country Risk Analysis
  - Foreign Investment Analysis: Direct and Portfolio
  - Currency Convertibility: Current Account and Capital Account
  - South Asian Currency Crisis
- 5. International Trade
  - Developments in International Trade Theory
  - Trade Policy Instruments and Liberalization
  - World Trade Organization
- 6. Legal Dimension in International Business

# II.20 INTERNATIONAL FINANCIAL MANAGEMENT

# [3 Credits]

### **Objectives**

- To introduce the environment of international finance and its implications on international business.
- To analyse the nature and functioning of foreign exchange markets, determination of exchange rates and interest rates and their forecasting.
- To define and measure foreign exchange risks and to identify risk management strategies.
- To explore the sources of long term finance and design financial strategies.
- To integrate the global developments with the changing business environment in India.

- 1. Intricacies of Foreign Exchange Markets
  - Spot and Forwards Exchange Rates
  - Eurocurrency and Domestic Interest Rates
  - Quotations and Market Rules
- 2. Parity conditions in International Finance
  - Purchasing Power Parity
  - Covered Interest Parity
  - Real Interest Parity
  - Parity Conditions and Managerial Implications
- 3. Forecasting Exchange Rates
  - Fundamental Factors Affecting Exchange Rates
  - Time Series Forecasting Models
- 4. International Sources of Finance for the Firm
  - Bond Financing (Fixed and Floating Rate Notes)
  - Loan Financing (Syndicates Loans)
  - Securitised Financing (Euronote)
  - Equity Financing (GDR and ADR)
  - Features of Loan Agreements: Loan Negotiations
- 5. International Financing Decision
  - Issues in Overseas Funding Choices
  - Economic Circumstances and overall Funding Choices
  - Funding and Risk Management Aspects

- 6. Analysis of International Capital Budgeting, Cost of Capital of a Foreign Investment
- 7. Foreign Exchange Risk Management
  - Conceptual Overview
  - Nature of Exposure (Economic, Transaction, Translation)
  - Hedging and Speculation
- 8. Derivatives and Exposure Management
  - Currency Forwards
  - Currency Options
  - Currency Futures
  - Currency Swaps
  - Interest Rate Risk Management
- 9. Framework of Managing Exposures, Accounting Implications of Forex Transactions
  - Derivatives Accounting, Risk Management in a Treasury

# II.21 ISSUES IN EMPIRICAL FINANCE

### [3 Credits]

#### **Objectives**

This course will cover some applied issues in Finance. The issues will be discussed in a way that will facilitate students to appreciate empirical issues and help identify research questions in the areas discussed. The topics discussed will also include survey of few empirical studies, evaluation of econometric techniques, and research applications in the Indian and international context. The course also gives students to prepare their own research questions, and make presentations during the term.

# **Topics**

The topics would be broadly in the areas of empirical finance, would cover, but not limited to, the following areas:

- 1. Financial Market Microstructure Issues (of Bond & Stock Market), Liquidity in Short term and Long term market segments.
- 2. Asset Pricing Theories & Applications I: Mean-Variant Portfolio Frontier, Separation Theorem,
- 3. Asset Pricing Theories & Applications II: Capital Assets Pricing Model, Arbitrage Pricing Theory, Conditional CAPM
- 4. Term Structure Modeling and Yield Curve Building, Idiosyncratic factors affecting yield and prices in bond markets, YC and the Economy.
- 5. Volatility Modeling and Forecasting, ARCH & GARCH Processes, Volatility Estimation in Recent Financial Market Turbulence.
- 6. Risk Measurement in Financial Institutions, Measuring Market and Credit Risks, Credit Risk Analysis and Measuring Default Adjusted Bond Return.
- 7. Empirical issues in International Finance, International Arbitrage and Parity Conditions, Yen Carry Trade and Interest Rate Parity,
- 8. International Investment Issues, International Capital Asset Pricing Model(I-CAPM Extension).

9. Introduction to Financial Stochastic, Interest Rate Modeling, generating Interest Rate Processes, Vasicek and Cox-Ingersoll and Ross calibration.

# II.22 MERGERS, ACQUISITION AND CORPORATE RESTRUCTURING

### [3 Credits]

#### **Objectives**

- To deal with the most current subject in depth.
- For inter-link the subject of finance with the major strategic decisions of a proactive firm.

# **Topics**

- 1. Various Forms of Business Alliances
- 2. Strategic Choice of Type of Business Alliance
- 3. Who should go for Merger and Acquisition and Take-over
- 4. Defining and Selecting Target
- 5. Pricing of Mergers (Pricing the Competitive Bid for Take-over)
- 6. Negotiation/Approach for Merger, Acquisition and Take-over
- 7. Contracting
- 8. Implementation of Merger and Acquisition
- 9. Managing Post-Merger Issues
- 10. Legalities Involved in Merger, Acquisition and Take-over
- 11. Ethical Issues of Merger and Take-over
- 12. Accounting for Mergers
- 13. Financing the Mergers and Take-overs
- 14. Corporate Restructuring
- 15. Divestment and Abandonment

# II.23 OPTIONS AND FUTURES

## [3 Credits]

#### **Objectives**

The course aims to develop an understanding of the importance of financial derivatives and the institutional structure of the markets on which they are traded as well as developing the analytical tools necessary to price such instruments. The course will have three main parts:

- First, the most commonly traded derivative instruments will be introduced, and their role in the modern capital markets, in particular for risk management, explained both from a theoretical as well as practical point of view.
- Second, there will be discussion on the institutional structure of the markets on which such instruments are traded.
- Third, the pricing of the derivatives instruments and the risk characteristics of derivatives will be discussed in detail.

The course will conclude with a discussion on derivatives application in India, namely index options and futures, computations of the index and its impact cost, and the analytical issues relating to trading in Indian markets.

## **Topics**

- 1. Definition of Derivative Securities
  - Brief History of Derivatives, Evolution of Commodity, Currency, Stocks and Interest Rate Derivatives
  - Structure of Derivative Markets, Forwards, Futures, Options, Swaps, etc. Examples of more Sophisticated Derivatives: Barrier Options, Compound Options, Options on Futures, Swaptions
  - Underlying Assets: Equities, Currencies, Commodities and Interest Rates.
     Explaining Cash Market Microstructure and Derivative Markets, Reasons for Trading: Risk Management, Speculation and Arbitrage

### 2. Market Characteristics

- Futures and Options Contract Specifications, Underlying Asset, Contract Size, and Delivery Specifications. Marking to Market using Margin Accounts. Familiarising with Market Quotes. Trading Strategies involving Options and Futures.
- Interest Rate Derivatives, Contractual Specification: Floating and Fixed Rate. Valuation of Interest Rate Derivatives.

#### 3. Derivatives Pricing Theory

- Option Pricing: Black-Scholes formula for Option Pricing: Derivation and Properties.
  - Volatility: Estimated vs. Implied, Options on Dividend-paying Assets, Warrants and Convertibles.
  - Binomial Models for Option prices: Definitions and Terminology.
  - Continuous-Time Models.
- Futures Pricing: Pricing by Arbitrage: Relationship between Futures and Spot Price (cost of carry and reverse cost of carry), Difference between Futures and Forward Price, Futures on Dividend-paying Assets.

#### 4. Risk Analysis and Management

- Risk Measurement and Management Framework, Option's Delta, Gamma, Vega, Theta, Rho.
  - **o** Hedging with Futures. Derivatives Disclosure: Accounting Issues in Derivatives.

#### 5. Options and Futures Applications in India

- Structure of Indian Stock Markets and the Operational Efficiency of Options and Futures, Determination of the Fair Value of Futures and Options Prices, Interactions between Spot Equity Trading and Trading in Derivatives.
- Index Options and Futures, Constructing an Index, Methodology of Construction, Trading an Index. Conditions necessary to Improve the Market Structure in India and Policy Interventions.

# II.24 RISK MANAGEMENT AND INSURANCE [3 Credits]

#### **Objectives**

The Indian Insurance sector has traversed a full circle. Till 1956, when life insurance was nationalised, it was totally in the private sector. In 1971, commercial insurance was also nationalised. After around four decades of this nationalised monopoly, private sector participation has again been allowed. The ensuing competition is likely to offer challenging careers for MBAs. This course seeks to prepare the students for the same.

There are two kinds of career opportunities: one in the insurance companies *per se* and the other in terms of risk management in corporate sector using insurance as one of the tools. There are also other emerging career opportunities in insurance marketing and distribution, insurance advisory services and Third Party Administration (TPA) of insurance contracts.

This course will focus primarily on those concepts, techniques and issues in the context of a person aspiring for a career in insurance and risk management.

### **Topics**

- 1. Risk: Alternative Definitions, Types of Risk, Risk Management Process and Methods
- 2. Objectives of Risk Management
- 3. Risk Pooling and Insurance including Review of Probability Concepts
- 4. Institutions for Insurance and Reinsurance Economic Rationale and requirements
- 5. Insurance Laws and Regulation
- 6. Insurance Pricing
- 7. Asymmetric Information / Moral Hazard / Adverse Selection
- 8. Deductibles/Co-insurance
- 9. Life Insurance
- 10. Auto Insurance, Home Insurance, Worker Compensation / ESIC, Health Insurance Commercial Insurance: Transport, Marine, Catastrophe, Liability etc
- 11. Pension Plans
- 12. Corporate Risk Management and Insurance
- 13. Actuarial Mathematics

# II.25 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

# [3 Credits]

# **Objectives**

The focus of Security Analysis is on how others analyse your company's securities on their own. Whereas, that of Portfolio Management is on how investors analyse your company's securities in comparison with others' on the security market. The course is designed with a view:

- To acquaint the students with the working of security market and principles of security analysis; and
- To develop the skills required for portfolio management so as to be able to judge the competitive position of firms in capital market and review the related business decisions.

- 1. The Role of Security Markets in Economy
- 2. The Organisation and Mechanics of Indian Security Markets

- Various Securities and their Characteristics
- Objective of the Security Analysis
- Functions of an Organised Security Market
- Mechanics of Security Trading
- 3. Various Types of Security Markets and their Functions
  - Stock Exchanges
  - OTCEI
  - Depository
- 4. Role of SEBI with regard to Secondary Markets
- 5. The Role and Functions of Various Players and Agencies in the Secondary Market
- 6. Risk and Return
  - Utility Theory
  - Portfolio Theory
  - CAPM
  - APT
  - Multi-factor Models
- 7. Options and Futures
- 8. Security Analysis
  - Fundamental Analysis
    - Internal Value and Market Value of Various Securities; Internal Value and Market Value of Firm
    - Pricing of Security (IPOs and Seasoned Equity Open)
    - o Financial Statement Analysis
    - Projecting Earnings under Stable as well as Dynamic Conditions, including Risk and Inflation Factors
    - o The Risk Factors, including Internal Risk
  - Technical Analysis of Security Pricing
  - Market Efficiency and Behavioral Finance
- 9. Portfolio Management
  - Portfolio Theory
    - o Portfolio Criteria
    - Efficient Set
    - o Portfolio Selection and Diversification
    - The Shape and the Risk Function (including CAPM Model Technical Analysis, Random Walk and Martingale Model)
  - Portfolio Management
    - Portfolio Objective
    - Size of Portfolio
    - Selection Basis and Readjustment
    - o Timings of Disinvestment
- 10. Market Microstructure

# II.26 SOCIAL FINANCE, IMPACT INVESTING & INSURANCE [3 Credits]

#### Introduction

Social finance deals with savings, credits, pension, insurance and other forms of financial products that help the asset poor households and the marginalized communities, including micro entrepreneurs, engage in income-generating activities and to cope with risk. Providing business and employment opportunity to the population at the bottom of the pyramid require finance. Widening financial market access to these vast segments requires the design of innovative financial contracts and instruments, unbundling risk of lenders as well as borrowers, and most importantly credit enhancements and guarantees. Such innovations in financial contract design and risk unbundling can have tremendous potential for financial inclusion, ensuring equity and, at the same time, enhancing confidence among formal financial institutions to lend asset poor. Social Finance therefore is concerned with the design of financing mechanism and regulations which would cater to the financial needs of the asset poor, micro-entrepreneurs, and social venture start-ups.

#### Scope

This elective course intends to integrate the broader areas of finance that have implications for social sector involving asset poor. The course will address broadly the following issues:

- How do poor households organize their savings and consumptions, and meet their deficit spending, make investment decisions? What are the specific characteristics of cash flows of asset poor (on the demand side)?
- And how are traditional financial systems meet such demands (basically supply side perspectives, to serve only as a prelude)?
- What are some of the recent innovations in the markets for the Poor that facilitate risk unbundling, and made financing viable for the formal structure?
- What are some of the innovations introduced by the modern financial systems that have potential applications in financial inclusion? (micro insurance, securitization, weather insurance, etc)
- What are the financial market innovations that support savings & Investments of asset poor households?
- How innovations in transaction banking space do enables poor to have broader financial market access, while at the same time reducing transaction costs?
- How do companies in social sector create sustainable social value while working profitably?

• What are the governance issues, board composition, disclosures, and fiduciary responsibilities of companies that are in the social investing space?

## Pedagogy:

The course is built around conceptual rigor, international best practices and, most importantly, Indian case situations. Students present case situations in groups, and prepare finally a financial design in a social enterprise setting.

Topics:

#### 1. Financial Market Architecture and Access to Poor

Introductory overviews of demand and supply side issues of the financial markets for poor are discussed (on the supply side, contrasting formal vs informal credit markets and on the demand side, understanding the cash flow/budgeting pattern of low income households).

Portfolios of the Poor, by Daryl Collins, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthvan, Princeton University Press

#### 2. Financial Innovations as Market Access

Here we delve on pro-poor financial innovations that have gone beyond microcredit but with commercialization, pro-poor urban finance, low income housing finance (e.g. micro mortgages), micro-insurance products; etc.

Building Houses, Financing Homes: India's Rapidly Growing Housing and Housing Finance Markets for the Low-income Customer, Monitor Inclusive Markets (2010).

## 3. Micro Enterprise Financing Innovations

We examine the finance constraints faced by microenterprises, the institutional legal constraints restricting access to finance, Financial market innovations supporting SME finance(securitization, leasing, factoring, value chain lending with case studies); financing start-up and venture capital fund, credit guarantee mechanisms, etc

# 4. Impact Investing: Value Creation at the Bottom of the Pyramid

Here we seek to explore the strategies adopted by investors in social enterprises created value, by promoting innovations, the difference impact investing makes as contrast to stylized venture capital and private equity, balancing the needs of investors as well as social entrepreneurs.

Bridges Ventures: "Investing for Impact, Case Studies across Asset Classes" March 2010; Augustin Landier and Vinay Nair, Investing for Change, Oxford University Press, Dec 2008

# 5. Venture Capital Funds, Initial Public offers and Equity Infusion

Examine how finance companies in social sector could create sustainable social value while working profitably, or if the profitability issue was overstretched.

Nothing Ventured, Nothing Gained: Addressing the Critical Gaps in Risk-Taking capital for Social Enterprise,"Jed Emerson, Skoll Centre for Social Entrepreneurship at Oxford SAID Business School;

Acumen Fund: Valuing a Social Venture: Michigan Business School; Initial Public Offers: SKS in India, Havard Business School Case Study.

# 6. Structured Products, Credit Enhancements and Guarantees, Micro loan securitization, structuring deals and legal issues

Cases will drawn extensively from ICRA and CRISIL Data base

#### 7. Capital Markets & Access to Finance

We discuss here also the financial innovations to support savings & Investments of asset poor households, framework for managing inflation risks, etc, drawing from global as well as Indian experience. We also draw evidence from field studies as to how poor save and invests, with typical risk-return analysis.

Micro-SIP(SBIMF Chhota SIP fund), Micro-Pension(context of Indian Pension Reform); investment linked insurance products; GDP & Inflation-Indexed Bonds(case of RBI 2003 Inflation Indexed Bond); community-based health mutual fund

#### 8. Investment and Insurance-linked Products

Transition from a credit-based to credit-insurance based financing arrangement, thereby including micro-insurance products.

# 9. Weather Derivatives & Crop Insurance

Weather insurance in Agriculture, Livelihood Risk Management using Crop Insurance; Index Based Insurance are discussed, with valuation of insurance products workings.

Index- based weather insurance adopted by BASIX-ICICI Lombard; Barish Bima Yojana; etc

#### 10. Commodity Finance and Risk Management

We also discuss the Indian commodity derivatives markets and how have they benefitted farmers.

Cases such as eliminating middlemen in rural markets suing the ITC e-Choupal Initiative(Harvard Business School Case Study); Price dissemination and Commodity Hedging model of Gramin Suvidha Kendra(MCX Case Study) are discussed.

#### 11. Technology Innovations for Financial Inclusion

We discuss here the innovations in transaction banking enabling poor to have financial market access; while at the same time reducing transaction costs.

Discussed by drawing cases from FINO, Micro-Save, M-Pesa(Kenya), etc.

# 12. Credit Rating Models of Social Finance, Credit Scoring Model, Credit Information for Microenterprises, SME Exchange in India

Here we also discuss the distinct features of micro loans such as unique borrower profile, dependence on group credit behavior and relatively lower rating of originators, etc that define unique risks faced by the institutions.

Scoring: The Next Breakthrough in Microcredit?" Mark Schreiner. CGAP Occasional Paper (2003)

### 13. Corporate Governance & Social Finance

We address here the governance issues, including board composition, disclosures, and fiduciary responsibilities of companies that are in the social investing space. We compare and contrast with the governance mechanisms of private listed/unlisted companies as per SEBI Guidelines.

SKS Microfinance Valuation/ Post IPO

### 14. Preparing B Plan

Here we understand the practical issues of leveraging formal finance in a social enterprise setting, combining market based financing, with/out guarantees and assistance. Students prepare investment-ready proposals, possibly taking guidance from social entrepreneurs, use traditional project financing/valuation skills that they are provided in CAPEX/Valuation courses. This portion may be combined with a presentation from a guest faculty.

# II.27 STRUCTURED FINANCE [3 Credits]

# **Objectives**

Structured Finance is the design of debt, equity and hybrid financing techniques in order to resolve particular issuer or investor problems that cannot be solved by conventional methods. This course will be taught around several major topics employing in-depth group work on case studies and deal documentation. The focus will be on identifying situations that call for nonstandard corporate finance solutions and the design and pricing of the situation-specific financing instruments. Examples of such situations include stress-induced financial restructuring, recapitalizations, private equity and leveraged buyouts, and arbitrage-driven hybrid notes

- 1. Introduction
  - Definition of Structured Finance
  - Major Types of Structured Finance Products
  - Case Study: How Enron has affected the Boundaries of Structured Finance

# 2. Some Issues Related to Credit Derivatives

- Credit Default Swaps
- Credit Default Swap Index
- Basket Default Swaps
- Asset Swaps
- Total Return Swaps
- Economics of a Total Return Swap

### 3. Securitization Structure

- Use of Interest Rate Derivatives in Securitization Transactions
- Credit Enhancement
- Detailed Illustration of a Securitization

# 4. Cash Flow Collaterized Debt Obligations

- Family of CDOs
- Basic Structure of a Cash Flow CDO
- CDOs and Sponsor Motivation
- Compliance Tests

## 5. Synthetic Collaterized Debt Obligation Structures

- Motivations for Synthetic CDOs
- Mechanics
- Funding Mechanics
- Investor Risks in Synthetic Transactions
- Variations in Synthetic CDOs
- The Single-tranche Synthetic CDO
- Summary of the Advantages of Synthetic Structures
- Factors to Consider in CDO Analysis

### 6. Securitized and Synthetic Funding Structures

- Commercial Paper
- Asset-Backed Commercial Paper
- Synthetic-Funding Structures

## 7. Credit-Linked Notes

- Description of CLNs
- Illustration of CLN
- Investor Motivation
- Settlement
- Forms of Credit Linking
- The First -to- Default Credit Linked Note

## 8. Structured Notes

- Structured Notes Defined
- Motivation for Investors & Issuers
- Issuance Form and Issuer
- Creating Structured Notes
- Examples of Structured Notes

# 9. Large Ticket Leasing: Leasing Fundamentals

- How Leasing Works
- Types of Equipment Leases
- Full Payout Leases versus Operating Leases
- Reason for Leasing

- Types of Lessors
- Lease Brokers and Financial Advisors
- Lease Programmes
- Financial Reporting of Lease Transactions by Lessees
- Income Tax Requirements for True Lease Transactions
- Synthetic Leases
- Valuing a Leases: The Lease or Borrow-to-Buy Decision

# 10. Leveraged Leased Fundamentals

- Parties to a Leveraged Lease
- Structure of a Leveraged Lease
- Closing the Transaction
- Cash Flows During the Lease
- Debt for Leveraged Leases
- Facilities Leases
- Construction Financing
- Credit Exposure of Equity Participants
- Tax Indemnification for Future Changes in Tax Law
- Need for a Financial Advisor
- The Steps in Structuring, Negotiating, and Closing a Leveraged Lease

# 11. Project Financing

- What is Project Financing?
- Reasons for Joint by Owned or Sponsored Projects
- Credit Exposures in a Project Financing
- Causes for Project Failures
- Credit Impact Objections
- Accounting Considerations
- Meeting Internal Returns Objectives
- Other Benefits of a Project Financing
- Tax Considerations
- Disincentives to Project Financing
- Recent Trends

# III GENERAL MANAGEMENT

## III.I BUSINESS LAW

[3 Credits]

## **Objectives**

The objective of this course is to provide the students with practical legal knowledge of general business law issues and topics to help become more informed, sensitive and effective business leaders. As the business managers are called upon to create value, marshal resources and manage risk, it is imperative that they should understand fundamental legal issues pertaining to business world to enhance their ability to lead and delegate. A sound knowledge of the law is a strategic asset which if timely and properly applied will provide the prospective managers and their organisations, immediate and long-term benefits and the ability to avoid costly mistakes.

- 1. The Indian Contract Act, 1872
  - Proposal- its communication, acceptance and revocation
  - Agreement vis-à-vis contract, void agreement & voidable contract
  - Consideration essential elements, exception to rule- No consideration no contractprivity of contract and consideration
  - Capacity to contract
  - Free consent coercion, undue influence, misrepresentation, fraud
  - Mistake of fact and of law
  - Legality of object agreements opposed to public policy and in restraint of marriage, trade & legal proceedings
  - Contingent contracts
  - Performance of contract-liability of joint promisor
  - Consequences of breach of contract-liquidated damages and penalty
  - Ouasi contract
  - Indemnity and guarantee-surety's liability
  - Bailment-Duties and liabilities of bailor and bailee, bailment of pledges
  - Agency-types of agency, agents duty to principal and vice-versa, ratification and revocation of agent's authority
- 2. The Companies Act, 1956
  - Meaning, characteristics and kinds
  - Lifting the corporate veil
  - Registration and incorporation
  - Memorandum of Association–alteration therein
  - Doctrine of Ultravires-consequences of ultravires transaction
  - Articles of Association-alteration therein, its relation with memorandum of Association
  - Rule of constructive notice
  - Doctrine of Indoor Management
  - Prospectus- liability for mis-statement, statement in lieu of prospectus
  - Shares-statutory restrictions, kinds of share capital
  - Debentures
  - Directors- Position, Appointment, Removal, Power & Duties, their responsibility for offence under N.I. Act & I.T.Act,2000
  - Meetings

- Majority Powers and Minority Rights
- Prevention of Oppression and Mis-management
- Winding up-liability under N.I.Act, Winding up by order of court and subject to its supervision
- Voluntary winding up
- Conduct of winding up
- 3. The Partnership Act, 1932
  - Nature of Partnership
  - Relation of partners-inter se
  - Relation of partners to third parties
  - Incoming and outgoing partners
  - Dissolution of Firm
  - Registration of Firms-effect of non-registration
  - Offences by Firm-liability under N.I. Act & I.T. Act, 2000
- 4. The Negotiable Instruments Act, 1881 As Amended by The Negotiable Instruments (Amendment and Miscellaneous Provisions) Act, 2002
  - Notes, Bills and Cheques-Promissory notes, Bills of exchange and cheques (Demand drafts, payment orders etc.)
  - Drawer, Drawee, Acceptor, Holder, Holder in due course, payment in due course
  - Endorsement-Endorsement in blank and endorsement in full, conversion of endorsement in blank into endorsement in full and its effects
  - Negotiation
  - Where account stated is different in words and figure
  - Presentment-At sight, on presentment, after sight, presentment for payment
  - Maturity-Calculating its period
  - Noting and protest-Protest for better security
  - Presumption as to negotiable instruments-and estoppel
  - Cross Cheques-Cheques crossed generally and specially
  - Of penalties in case of Dishonour of certain cheques for insufficiency of funds etc.
  - Offences by companies

### III.2 BUSINESS RESEARCH METHODS

#### [2 Credits]

## **Objectives**

- To understand the concept and process of Business research in business environment.
- To know the use of tools and techniques for exploratory, conclusive and causal research.
- To understand the concept of measurement in empirical systems and its validity and reliability.
- To use statistical techniques for analysis of research data.
- To realise the applications of Business research.

- 1. Introduction to Business Research, Definitions, Nature, Scope
- 2. Concept, Significance

- 3. Research Process, Research Design
- 4. Exploratory Research: Focus Group, Projective Techniques, Depth Interview, Observation, Case Study Method, Secondary Data Collection and Analysis
- 5. Problem Discovery ~ Problem Definition, Hypothesis Formulation
- 6. Causal Research, Experimental Designs
- 7. Questionnaire Construction
- 8. Measurement, Basic Scales, Validity Analysis, Reliability Analysis, Attitude Measurement Scales
- 9. Sampling
- 10. Field work, Non-sampling Errors, how to overcome them, Data Preparation and Preliminary Analysis
- 11. Introduction to Multivariate Analysis
- 12. Factor Analysis, Regression Analysis, Cluster Analysis, Correspondence Analysis, Conjoint Analysis
- 13. Reporting and Concluding Integration

# III.3 MANAGERIAL COMMUNICATION

#### [3 Credits]

# **Objectives**

- To enable the students to become aware of their communication skills and sensitise them to their potential to become successful managers
- To introduce them to some of the practices in managerial communication that are in vogue
- To help them acquire some of the necessary skills to handle day-to-day managerial responsibilities, such as
  - O making speeches,
  - O controlling one-to-one communication,
  - O enriching group activities and processes,
  - O giving effective presentations,
  - O writing letters, memos, minutes, reports and advertising, and
  - O maintaining one's poise in private and in public
- To build their confidence and to install competitiveness by projecting a positive image of themselves and of their future.

- 1. Introduction to managerial communication
- 2. Principles of nonverbal communication
  - through clothes and
  - body language
- 3. Types of managerial speeches
  - speech of introduction
  - speech of thanks
  - occasional speech
  - theme speech

- 4. Mastering the art of giving interviews in
  - selection or placement interviews
  - discipline interviews
  - appraisal interviews
  - exit interviews
- 5. Group communication by way of
  - meetings
  - group discussions
- 6. Introduction to managerial writing
- 7. Business letters
  - routine letters
  - bad news and persuasing letters
  - sales letters
  - collection letters
  - job application letters
- 8. Internal communication through
  - memos, minutes, notices
  - reports
- 9. Principles governing the use of audiovisual media
- 10. Principles of Effective Presentations
- 11. Business and social etiquette

# III.4 MANAGERIAL ETHICS

# [2 Credits]

## **Objectives**

- To understand why human beings are ethical, why they are not
- To gain insight into and awareness of ethical behavior
- To become familiar with inherent conflicts in being ethical [if it weren't hard, everyone would do it]
- To gain practice in seeing the ethical dilemmas in common business situations, to recognize them and to find ways to resolve
- To broaden ones understanding of what it means to act rightly while in business
- To commit oneself to mutual ethical treatment of the human person and do ethical business and ethical leadership
- To make ethical decisions effectively and decisively based on ethical thinking and decision making processes using decision frameworks

- 1. Introduction: Why human beings are ethical, why they are not
- 2. Moral development in humans, theories, concepts
- 3. Definitions, theories of ethics and ethics projects

- 4. A Decision Making Model: Ethics as Making decisions and choices
- 5. Decision making frameworks
- 6. Conflicts and Ethical Dilemmas moral & ethical dilemmas
- 7. Ethics and Business: A sense of business ethics
- 8. Ethics and International Business: Ethics Issues beyond borders
- 9. Ethics and Economics: Ethical concerns of economic individuals and societies
- 10. Ethics and Environment: Environmental Ethics Awareness
- 11. Business and Social Responsibility: Connecting people with their communities and inspiring positive change
- 12. Behaviour of Business to its colleagues / competitors
- 13. Business Disciplines Ethics of Marketing & advertising
- 14. Business Disciplines Ethics of Finance & Accounting
- 15. Business Disciplines Ethics of IT / ICT / Internet etc
- 16. Business Disciplines Ethics of HR / and related aspects
- 17. Business Disciplines Business response to environmental problems environmental ethics
- 18. Business Disciplines Production related ethical issues
- 19. Business Disciplines International standards, corporate governance, corporate citizenship, Global reporting initiatives, Global compact, Millennium development goals, etc.
- 20. Summary & Concluding session

# III.5 ANALYSIS FOR MANAGERIAL DECISION MAKING

[3 Credits]

## **Objectives**

Real life problems often present situations which are multi-dimensional, often non-quantifiable and inter-related. These situations are further accentuated by presence of multiple stakeholders (and their coalitions) which either add to the dimensions or create constraints for a decision maker. Targeted towards participants who have an orientation towards being consultants or those who want to develop their problem-solving skills which may later be applied in any unstructured situation, this course involves identifying different aspects of real life problems and developing solutions that take care of the different aspects in an integrated manner. The course is oriented towards developing participants' decision making in a holistic way, stressing significantly on improving participants' skills in gathering, processing and presenting relevant data in support of their decisions.

- 1. Critical Incident Method
  - Introduction to Critical Incident Method in Management a post-facto investigative method
  - Data requirements
  - Recording and presentation of data

- Concerns about reliability of data
- Data triangulation
- Methods of analysis
- Drawing conclusions testing for validity of conclusions
- Identifying gaps in explanation and need for further data
- Presenting the findings of the study

#### 2. Situational Analysis

- Understanding and appreciating the situational nature of management
- The contingency model of management
- Situational Management and political implications of stakeholders' coalitions
- 3. Soft System Analysis
  - Introduction to Soft System Analysis in Management differences and similarities with Critical Incident Method
  - Data requirements
  - Recording and presentation of data
  - Concerns about reliability of data
  - Data triangulation
  - Methods of analysis
  - Drawing conclusions testing for validity of conclusions
  - Triangulation of explanations
- 4. Industry / Policy Analysis
  - Industry Analysis and deriving implications for an organization
  - Policy analysis and deriving implications for an industry/ organization

## III.6 CORPORATE IMAGE BUILDING

## [3 Credits]

# **Objectives**

- To bring out importance of image building for an organisation.
- To identify the components which make-up an image.
- To trace some of the processes involved in creating image.
- To evolve some strategies for projecting a positive and consistent image of an organisation and its personnel.

- 1. Corporate Image in Contemporary Management Studies
- 2. Components of an Individual Image
- 3. Advertising and Corporate Image
- 4. Public Relations of an Institution
- 5. The Grapevine and Rumours
- 6. Stereotype
- 7. Propaganda
- 8. Case Histories of Corporate Images in Private and Public Sectors

# III.7 EMOTIONAL INTELLIGENCE AND MANAGERIAL EFFECTIVENESS

# [3 Credits]

#### **Objectives**

There is a mounting body of evidence that emotion is the most powerful resource we have. Emotions are lifelines to self-awareness and self-preservation that deeply connect us to ourselves and others, to nature and the cosmos. Emotional intelligence is the ability to sense, understand, and effectively apply the power and acumen of emotions as a source of human energy, information, connection, and influence.

This course will enable the students to become aware of the sources of emotions and learn how to deal with human emotions. Making use of Enneagram typology, the course will focus on the managerial competencies and their emotional impacts.

#### **Topics**

- 1. Introduction
- 2. Emotions and the Tripartite Brain
- 3. Emotional Competencies
- 4. Executive EQ
- 5. Emotions and Enneagram
- 6. Rational Emotive Therapy
- 7. Emotional Transformation
- 8. Script Analysis using Enneagram
- 9. Measuring Emotional Intelligence
- 10. Emotions and Childhood
- 11. Role of Emotions
- 12. Emotions and Attitudes

### III.8 MARKETING LAW

#### [3 Credits]

### **Objectives**

The Law and our legal system have a pervasive impact on marketing activities. Decisions of marketing executives frequently raise issues which should be carefully evaluated as to their legal consequences before they are implemented. The failure to appreciate these legal implications can lead to seriously damaging, if not disastrous, results for a firm.

The approach of this course would be to address National Laws and court decisions that relate to the four main areas of marketing study, the so-called "four P's" of marketing: product, price, place and promotion.

- 1. Legal Issues Relating to Product Quality and Material Movement
  - Conditions and warranties
  - Implied Conditions
  - Rule of Caveat Emptor [Buyer Beware]

- Transfer of Title
- Nemo Dat Quod Non Habet
- Sea Transit: FOB, CIF, Ex. Ship
- Rights of Unpaid Seller
- Lien
- Stoppage in Transit
- Right to Resale
- Remedies
- 2. Rules Relating to Hire-Purchase
  - Position of Parties to Hire Purchase
  - Conditions and warranties
  - Limitation on Hire Purchase Charges
  - Passing of Property
- 3. Laws Relating to Common Carrier
  - Definition of Common Carrier
  - Distinction between Common Carrier and Pvt. Carrier
  - Liabilities of Common Carrier
- 4. Legal aspects of Delivering Goods for Carriage and Warehousing
  - Rights of Warehouse
  - Duties and Liabilities of Warehouse
- 5. Rights to do any Trade or Business
  - Fundamental
  - Legal
  - Restrictions
- 6. Restraint of Trade
  - Knock-Out Agreement
  - Trade Combination
  - Solus or Exclusive Dealing Agreements
  - Restraints upon Employees
- 7. Laws Relating to Services Marketing
  - Concept of Service
  - Deficiency in Service
  - Real Estates
  - Hospital
  - Carrier
  - Courier
  - Bank
  - Transport Service
- 8. Legal Aspects of Restrictive Trade Practices
  - Tie-in Sales or Full Line Forcing
  - Price Fixing
  - Predatory Pricing
  - Exclusive Dealing
  - Territorial Restriction
  - Refuse to Deal
- 9. Legal Aspects of Unfair Trade Practices and some aspects of Advertisement

- False and Misleading Representation
- Bait Advertising and Bargain Price
- Offering Gifts and Prizes and Conducting Promotional Contests
- Withholding Information about Final Results of scheme
- Hoarding and Destruction of Goods
- Spurious Goods

# 10. Competition Law

- Introduction
- Meaning
- Anti-competitive Agreement
- Anti-competitive Agreement: Competition within India & Effects Doctrine
- Anti-competitive Agreement: Horizontal
- Anti-competitive Agreement: Fixing Prices
- Anti-competitive Agreement: Vertical Agreements
- Anti-competitive Agreement: Limiting and Controlling Production & Investment
- Acquisition, Merger and Amalgamation
- Anti-competitive Agreement and WTO

## IV INFORMATION SYSTEMS

# IV.1 MANAGEMENT INFORMATION SYSTEMS [3 Credits]

### **Objectives**

- To create an awareness in upcoming managers, of different types of information systems in an organisation so as to enable the use of computer resources efficiently, for effective decision making.
- To understand various MIS operating in functional areas of an organisation and explain its relationship with the various activities of the organisation.
- F To understand how MIS is developed and implemented for various levels in an organisation.
- To explore the use of some common IS development tools.

- 1. Management and Systems
  - Advance in Management
  - The process of MIS Development
  - MIS Organisation
  - Information Dynamics
- 2. Planning
  - Design and Implementation of MIS
  - IS Strategic Planning
  - MIS Design Gross Design Concepts
  - Detail Design Concepts
  - MIS Implementation
  - Acquiring Information Systems: Contemporary Approaches
- 3. System Life Cycle
  - Information Flow
  - Entity Relationship Modeling
  - Data Modeling
  - Detailed Process Analysis
  - Data Flow Diagrams
- 4. Decision Making with MIS
  - System Concepts for MIS
  - Data
  - Information and Communication
  - Problem Solving and Decision Making
- 5. IS Security, Control System Success and Failure
- 6. The Future Trends in MIS
  - The Emerging IT Trends
  - Electronic Data Interchange
  - Objected Oriented Approach
  - Networking (Information System Highway)
  - Extended Enterprise Systems
  - Managing International Information Systems

# IV.2 BUSINESS AND DATA COMMUNICATIONS NETWORKS

[3 Credits]

# Objectives

The convergence of computing and telecommunication technologies revolutionised the field of IT. We have witnessed the impact of it in business practices in the last decade. The business that used to be conducted over private telecommunication systems has been moved onto Internet-based data communication networks. The world has shifted from a broadcast to interactive paradigm. People have started providing personalised service economically. Market has become boundary less. In all these, ICT has taken the central role. As predicted by experts, the demand for ICT products and services are increasing exponentially and keeping pace with this demand, the technology is also developing. Currently, for a problem, more than one technological solution is available to a business organisation. The wide use of this technology will make it pervasive in the near future.

The purpose of this course is to familiarise students with the concepts of communication networks. Here, students are expected to learn the theoretical background of the Data Communications and Networking, and their application into business organisation along with issues related to the next generation network.

Course goal is to make the students acquainted with the following:

- Computer and telecommunication technology
- Market for communication services
- Recent trends in this communication service market
- Challenges related the available technologies

- 1. Introduction
- 2. Fundamental to Digital Data Communications
- 4. Introduction to Communication Protocols and OSI Reference Model.
- 4. Choice of Communication Media
- 5. Techniques to Ensure Reliable Data Communications
- 6. Different LAN Technologies- merits and demerits
- 7. Network Topologies, Types of Networks, Network Components
- 8. Control and Operational Issues in Data Communication Network
- 9. Addressing Schemes for Internet
- 10. Design and Technology of Back Bone Networks
- 11. Current and Next generation Networks and Related Issues (Infrastructure)
- 12. Current and Next generation Networks and Related Issues (Mobility)
- 13. Techniques for Network Operation and Management
- 14. Pricing of Network Services
- 15. Pricing models for Network Bandwidth
- 16. Case (Network) to Derive Competitive Advantages
- 17. Telecommunication Market and Regulation Prevailing in India (TRAI)

# IV.3 BUSINESS INTELLIGENCE AND DATA MINING

### [3 Credits]

# **Objectives**

- Identify the use of data warehousing and data mining in different business applications
- Identify the different data warehouse architectures and data warehouse models
- Recognise the various data mining techniques.
- \* Know how the data mining is useful in an e-commerce environment.

- 1. Data Warehousing
  - Introduction and General Principle
  - On-line Transaction Processing (OLTP)
  - Data Warehouse (DW) Architecture Fundamentals, Data Mart
  - Approaches to Architecture
    - o Top-down, Centralised
    - o Bottom-up, Architected
- 2. Data Warehouse Process
  - Technical and Business Meta Data
  - Meta Data Process
  - Data Warehouse Design
  - Star and Snowflake Schemas
  - Online Analytical Processing (OLAP) Architecture
  - Multidimensional Database (MDD), Data Cubes
  - ROLAP Data Model
  - MOLAP Data Model, Logical Models for Multidimensional Information
  - Conceptual Models for Multidimensional Information
  - Query and Reporting, Executive Information Systems (EIS), Data Warehouse and Business Strategy
- 3. Data Mining (DM)
  - Fundamental Concepts, Architectural Aspects of Data Mining
  - Data Mining Techniques
  - Data Mining Issues and Challenges
- 4. The Business Context of Data Mining
  - Data Mining for Process Improvement, Data Mining as a Research Tool
  - Data Mining for Marketing, Data Mining for Customer Relationship Management
- 5. Association Rules
  - Introduction and Overview, Discovering Association Rules
  - A Priori Algorithm, Partition Algorithm, Incremental Algorithm
  - Border Algorithm, Association Rules with item Constraints
- 6. Classification and Clustering
  - Introduction, Clustering Paradigms, Partitioning Algorithm
  - K-means Clustering Algorithm, Hierarchical Clustering
  - Fuzzy c-means Clgorithm, Categorical Clustering Algorithm
- 7. Data Mining Tools
  - Decision Trees
  - Neural Networks

- Genetic Algorithms
- Rough Sets and Fuzzy Logic
- 8. Advanced Mining Techniques
  - Web Mining (Web content Mining, Web usage Mining, Web Structure Mining) and Mining for e-Business, Text Mining, etc.
- 9. DW and DM Applications
  - Business Intelligence, Customer Relationship Management with Case Studies.

# IV.4 BUSINESS MODELING THROUGH SYSTEM DYNAMICS

#### [3 Credits]

### **Objectives**

This introductory course on Business Modeling Systems Dynamics (BMSD) has been designed to impart skills of model based system enquiry to the students. In this course, the students will have an opportunity to

- Define System Models and to create System Models
- Learn to apply Systems Models to problems
- Learn to recognise opportunities to intervene in and improve systems
- Explain the value of Systems Dynamic approach in business today

- 1. Introduction
- 2. System Dynamics Paradigm
- 3. System-concepts and Theory
- 4. Elements of System Dynamics Modeling
- 5. Causal Loop Diagramming
- 6. Game- Beer Game
- 7. Behavior of Linear low-order System-analytical Solution
- 8. Learning of a Simulation Tool
- 9. Hands on with a Simulation Problem
- 10. Steps in System Dynamic Modeling
- 11. Steps in Dynamics Modeling
- 12. Building and Simulating System Dynamics Models
- 13. Validation of System Dynamic Models
- 14. Business Case Revenue Growth for a Restaurant
- 15. Business Case- Software Development Schedule Overrun

- 16. Business Case- Indian Tea Industry
- 17. Business Case Environmental impact analysis caused due to Industrial Growth
- 18. Business Case Stock Price Movement
- 19. Challenges for System Dynamics and Discussion.

### IV.5 CYBER LAW

### [3 Credits]

## **Objectives**

At the completion of this course the student will be able to

- Identify the emerging legal issues in a digital networked environment including general issues of jurisdiction and enforcement of rights and liabilities in cyberspace;
- Consider developments in specific areas of law arising in cyberspace including intellectual property, regulation of content /censorship, privacy and electronic commerce;
- Understand and evaluate how these developing concepts affect the flow of information in society and the work of information professionals;
- Fig. Identify and analyse recent developments in national and global information policy, the nature of the policy making process and the identities and positions of the various stakeholders;
- Consider the role of the information professions in this policy making process; and
- F Identify and evaluate resources and materials treating the Law of Cyberspace and IPR.

- 1. UNCITRAL Model Law
- 2. Introduction To Information Technology Act, 2000
  - Object; Scope; Scheme Of The Act; Relevancy With Other Laws.
- 3. Jurisdictional Issues
  - Civil Jurisdiction; Cause of Action; Foreign Judgment; Exclusion Clause of Contract; Jurisdiction under IT Act, 2000.
- 4. Digital Signature: Technical Issues & Legal Issues
  - Digital signature; Digital signature Certificate; Certifying Authorities and liabilities in the event of Digital Signature Compromise; E-Governance in India.
- 5. Concept of Cyber Crime and the IT Act, 2000
  - Cyber Crimes: Technical Issues; Cyber Crimes: Legal Issues; Cyber Crimes: Legal Issues [ Penalty under the IT Act ]; Cyber Crimes: Legal Issues [ Offences under the IT Act ]; Cyber Crimes: Legal Issues [Offences under IPC ]; Cyber Crimes & Investigation; Cyber Crimes & Adjudication.
- 6. Contract in the InfoTech World
  - Status of Electronic Contracts; Click –Wrap And Shrink Wrap Contract; Contract Formation In The Internet Vis- A –Vis Contract Law.
- 7. Protection of Cyber Consumers in India
  - Are Cyber Consumers Covered Under The Consumer Protection Act ?; Goods and Services; Defect in Goods and Deficiency in Services; Restrictive and Unfair Trade Practices; Consumer Foras, Jurisdiction And Implications on Cyber Consumers In India.
- 8. Evidence Law vis-a-vis IT Law

- Status of Electronic Record as Evidence; Proof and Management of Electronic Records; Relevancy, Admissibility and Probative Value of e-Evidence; Proving of Digital Signature; Proving of Electronic Message
- 9. European Convention on Cyber Crime
- 10. Role of Interpol in Cyber Crime

# IV.6 DATA STRUCTURES

# [3 Credits]

## **Objectives**

The course is about structuring and organising data as fundamental aspect of developing a computer application. The course will cover numerous structures, techniques and algorithms.

#### **Topics**

- 1. Fundamentals of Data Structures
- 2. Abstract Data Types
- 3. Complexity of Algorithms
- 4. Array, List Stacks and Queues: Implementation
- 5. Recursion: Recursive Program, Simulating Recursion
- 6. Trees: A VL-Tree, B-Tree
- 7. Graphs: Representation of Graphs, Shortest Path Algorithms, Minimal Spanning Tree Algorithms, Depth-first and Breadth-first Search
- 8. Searching: Sequential Search, Binary Search
- 9. Sorting: Elementary Sorting Methods, Heap-sort, Quick-sort, Merge-sort and their Analysis, Lower Bound on Complexity.

# IV.7 DBMS WITH ORACLE

### [3 Credits]

#### **Objectives**

- To familiarise the students with major DBMS concepts
- To emphasise effective ways of building a model of the real world and optimising it through normalisation algorithms
- To acquaint the students with major features of ORACLE as a DBMS software
- To create an understanding of the user-views of the real world and how such views are organised through ORACLE

Because of its dual role as a tool for modelling information systems and a software for maintaining the model of the system, the study of DBMS is now of fundamental importance in the field of computer science and management information system. The course addresses the twin goals of creating an optimal database design and demonstrating the use of ORACLE as the main data manipulation software.

#### **Topics**

- 1. Database Design
  - Basic Concepts
  - Relational Data Model
  - Relational Algebra
  - Problems of an Ad-hoc Design
  - Functional Dependencies
  - Decomposition of a Relation Scheme
  - Normalisation
  - Creating an Optimal Design
  - Multi-valued Dependencies
  - Fourth Normal Form
- 2. Database Manipulation
  - Introduction to ORACLE
  - Creating a Database Schema
  - Changing a Database Schema
  - Insertion, Deletion, Updation
  - Simple Retrieval
  - Complex Retrieval
  - ORACLE Forms
  - Default Forms
  - User-designed Forms
  - PL SQL Engine in Forms
  - Interacting Forms
  - Oracle Project Presentation

# IV.8 DECISION SUPPORT SYSTEMS

# [3 Credits]

### **Objectives**

Every day managers must make countless decisions that affect them, their work groups, and the organisation as a whole. Making decisions are often the most difficult part of a manager's responsibilities. This course deals with concepts, methods, applications of decision modeling to address various business issues. The basic objective of this course is to provide with an understanding of the key technical and managerial issues in the effective development and use of decision support systems in organisations. While highly effective decision support systems using traditional approaches and tools will be discussed, the focus of this course will be advanced techniques and tools to support decision making process.

- 1. Managerial Decision Making and Information Systems.
  - Requirement for Decision Support for Decision Making and other Executive Work
  - Human Decision Making Heuristics and Bounded Rationality
  - Types of Decision Support Systems
- 2. Decision Support Systems
  - Introduction and Overview
  - From Human Decision making to DSS
  - DSS Architecture

- Decision Modeling and Analysis
- Decision Support Developments
- Executive Information Systems
- Data Warehousing, Access, Analysis, Mining and Visualisation
- 3. Group Decision Support Systems
  - Goals of Group Decision Support Systems
  - Group versus Individual Activities
  - Types of Group DSS
  - Negotiation Support Systems
- 4. Intelligent Decision Support Systems
  - Knowledge-based Decision Support Systems
  - Knowledge Acquisition and Validation
  - Knowledge Representation
  - Inference Techniques
- 5. Decision Making Under Uncertainty
  - Introduction and Overview
  - Understanding Risk in Making Decisions
  - Managerial Risk Taking and Organisational Decision Making
  - Modeling Uncertainty
- 6. Advanced Techniques
  - Neural Network Fundamentals
  - Neural Network Architecture
  - Simple Neural Network Applications
  - Genetic Algorithm
  - Fuzzy Logic
  - Fuzzy Sets in Decision Making
  - Intelligent Software Agents and Creativity
  - System Integration and Future of DSS.

# IV.9 e-BUSINESS

# [3 Credits]

# **Objectives**

This course will provide the students with an analytical and technical framework to understand the emerging world of e-Business. e-Business poses both a challenge and an opportunity for managers. As a matter of competitive necessity, savvy managers must gain an understanding of the rapidly changing technology and business models. They need to develop a basic understanding of how electronic business differs from "real" business settings. They also need to acquire a hands-on knowledge of the underlying technological infrastructure in order to have a clear idea of the business and organisational possibilities inherent in these developments. This course will attempt to fill this need. At the end of this course, the student will be capable of:

- Evaluating the opportunities and risk factors involved in conducting e-Business.
- Identifying organisational processes and relationship that may have value added through the application of an e-business strategy.
- Assisting in the incorporation of an e-business strategy into the organisation's goals and objectives.
- Understanding the current state of e-business and the possible advantages and disadvantages of an e-business strategy.

- F Aiding in the development of managerial e-business tactics and objectives for the organisation's supply chain management functions.
- Exploring and explaining the legal and international implications of conducting e-Business.
- Analysing and evaluating how the Internet, e-business technologies, and e-business concepts can assist an organisation realise its goals and objectives.

#### **Topics**

- 1. Introduction, Background and Current Status
- 2. e-Business Architecture
- 3. Enabling Technologies
- 4. e-Business Infrastructure
- 5. e-Business Design, Capacity Planning, Performance Modeling
- 6. e-Business Models
- 7. e-Marketing, e-CRM
- 8. e-Business Security/Payment Services
- 9. e-SCM, e-Procurement
- 10. Knowledge Management
- 11. ERP, e-Business Backbone
- 12. e-Business Strategy into Action, Challenges, e-Transition and Summary
- 13. Business Plan Presentation and Demonstration "Materialising e-Business: From Idea to Realisation".

# IV.10 ENTERPRISE RESOURCE PLANNING

## [3 Credits]

# **Objectives**

ERP is now considered to be the price of entry for running a business, and at least at present, for being connected to other enterprises in a network economy. Without a backbone of ERP, no firm can hope for integration and fruitful interaction with it's customers, suppliers, partners and stakeholders:

- to understand the functionality that ERP systems deliver, and to harness this functionality for the benefit of the organization and the managers who are the users of the system
- This course thus approaches ERP systems from a *process perspective* rather than a purely IT perspective. Tailoring the ERP systems to the requirements of the process and the organization is a skill which is required in managers today.
- This course helps students learn the tools required for understanding and tailoring ERP systems.
- It also aims to provide an understanding of the managerial issues involved in the design and implementation of Enterprise Resource Planning Systems
- Integration of the business process of an organization and extension of these processes to the supply chain comprising of suppliers and customers is also a focus of the course

# **Topics**

- 1. Introduction to ERP (also using SAP R /3) systems.
- 2. Linkage with business processes and BPR
- 3. a. Modeling the core business processes with support tools from an ERP software (SAP)
  - b. Configuring an ERP system an instance of SAP R/3 (LAB) [optional]
- 4. Mapping business processes in an organization and case for process improvement (BPR)
- 5. Managerial issues in implementing ERP systems for organizations
- 6. Extending ERP systems to suppliers and customers. (SRM, CRM, SCM)
- 7. Managing ERP systems benefits. Managing businesses processes using information from ERP systems.
- 8. Concepts of integration and tailorability, and the new ERP systems.

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## IV.11 I S STRATEGY

## [3 Credits]

## **Objectives**

The objective of this course is to arm the students, from both Business and Technology sides, with the knowledge to create substantial shareholder value by creating a well thought out and clearly articulated IS Strategy i.e. aligning IT capability with business strategy.

This course introduces a business focused and quantitative approach and framework to IS Strategy. It helps you understand:

- The "big picture" of IS Capability where does IS Strategy fit in?
- IS Strategy what is it and how is it created?
- How to assess current alignment, identify and prioritise initiatives to achieve alignment and monitor and control value creation?
- How to work collaboratively between business and IT?

- 1. Introduction: Forces that Shape Business Strategy, Analysing the Impact of IT on Strategic Decision Making
  - IT Evolution and its Implications for Business (Business—IT Alignment)
- 2. IT Productivity Paradox
  - Factors Contributing to the IT Productivity Paradox. Does the Paradox Still Exist?
     Moving Beyond the Paradox.
- 3. Building the Networked Economy
  - Value Chain and Value Creation: The Notion of Value and Value Creation is Examined in Relation to Value Chains and Business Processes.
- 4. Reasons for Success and Failure of IT Projects
- 5. A Portfolio Approach to IS Development

- 6. Process Perspective of Valuation: To Mix Process and Variance Approach or not. Is it another Management Buzz Phrase?
  - Advantages of Variance and Process Approaches. Combining Process and Variance Approaches.
- 7. Valuation of IT Impact APV Method vis-a vis other Methods
- 8. Technology Justification Models:
  - The Real Options Approach. Economic Value Added. Statistical Approaches.
- 9. Managing IT Infrastructure IT Infrastructure and Strategic Alignment, Strategies for Managing Diverse IT Infrastructures
- 10. Managing IT Outsourcing: Strategies for Managing Outsourced Operations
- 11. Challenges and Opportunities in Assessing IT Payoff: Enterprise Resource Planning Systems
- 12. Strategic impact of IT on Entertainment Industry:
  - Strategic Dissonance, Burgelman and Grove, California Management Review, Winter, 1996.
- 13. Strategic impact of IT on Financial Services

# IV.12 INFORMATION SECURITY AND RISK MANAGEMENT

# [3 Credits]

#### **Objectives**

Enhancing understanding of the

- Types of risk and types of controls available to counter them
- Cryptology and encryption theory and practice
- Key elements of a Risk Management program
- Technical controls for risks in networks and e-mail
- Legal, moral and ethical concerns in Risk Management

- 1. Aspects of Security
  - Information Age and Risks
  - Vulnerabilities
  - Causes and Effects
  - Communications Security Criteria
  - Requirement Specification
  - System Design
  - Physical Security
  - Organisational Integrity
- 2. Risk Management
  - Grade of Risk
  - Level of Threat
  - Constraints
  - Balancing Risks and Countermeasures
  - Standards

- 3. Encryption Principles
  - Theory and Terminology
  - Public Key Systems
  - Massage Authentication
  - Underlying Mathematics
  - Data Encryption Algorithm
  - Public Key Algorithms
  - Current Developments
- 4. Keys and Key management
  - Algorithm and Keys
  - Types of Keys
    - o Secret Key
    - o Public Key
    - Hashing
    - o Digital Signature
  - Key Management
  - Digital Signature and One Way Hash Functions
- 5. Technical Controls
  - Access Control
  - File Protection
  - Virus Protection
  - Operating Systems
  - Databases and DBMSs
  - Security Protocols
  - Identification and Authentication
  - Network Security
  - Email Security
  - Intrusion Detection
  - Audit Trails and Audit Reduction
- 6. Application Specific Risks
  - Real-Time Control Systems
  - Banking and Financial Transactions
  - Legal and Contract Data
  - Intellectual Property
  - Personal Data
  - National Security

# IV.13 INTELLECTUAL PROPERTY RIGHTS

[3 Credits]

# Objective

Intellectual property refers to the rights which are attached to the creation of the mind and which take the form of a property. Though intangible in nature, intellectual property has become the driving force of many companies today. IBM and Microsoft undoubtedly are the best examples of what a company can achieve through the proper understanding and management of