Department of Management Studies

Master of Business Administration
(MBA)

Curriculum
(July 2014)
(for private circulation)

INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI 600036
# MBA Programme Curriculum
(Revised From July 2013-15 Batch)

## Pre-term Courses

### Non-CGPA Courses: July

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**Total Credits for Non-CGPA courses:** 4 0 3 3

## Quarter I

### AUGUST-OCTOBER

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29 MS6000    | SUMMER PROJECT (non-GPA) | 1   |

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- Non-CGPA Pre-term courses = 3, Summer Project – 1 = Total 4 credits.
- Total CGPA= 12 + 12 + 12 + 12 + 11 + 11 + 11 = 81 and Total overall credits = 85
- Total credits required for award of degree is 81 CGPA credits and 4 on Non-CGPA credits.

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## List of Electives

### HUMAN RESOURCES MANAGEMENT ELECTIVES

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**MARKETING ELECTIVES**
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**GENERAL ELECTIVE**

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CORE COURSES

MS 5003 BASICS OF PROBABILITY AND STATISTICS (2-0-0-1)

Objectives:
The objective of this module is to prepare the student for the two core modules in statistical modeling and analysis. This foundation module introduces the student to data, describing data and descriptive and graphical summaries of data. The student is also introduced to probability concepts and basic probability distributions which are vital for statistical analyses.

Contents:

- **Descriptive Statistics:** Different types of data: Data summarization methods; Tables, Graphs, Charts, Histograms, Frequency distributions, relative Frequency distributions, Relative frequency, Quantitative measures of Data: Measures of central tendency and dispersion.
- **Probability concepts:** Fundamental concepts; Conditional probability, Bayes’ theorem – revision of probability
- **Probability Distributions:** Notion of random variable and probability distribution; expected value and variance of a random variable.
- **Discrete distributions:** uniform, binomial and Poisson distributions.
- **Continuous distributions:** uniform, normal and exponential distributions; Normal Probability Model

TEXTBOOK


References:

MS 5004 BASICS OF ACCOUNTING AND FINANCE (2-0-0-1)

Objectives:
To provide students an understanding and knowledge of accounting and finance concepts

Contents:
- Understanding business organization, forms of business organizations and cash flow cycle of business
- Accounting principles, users of accounting information, Accounting process, Overview of Financial, Cost and Management Accounting and Financial Management
- Raising Finance – Sources, Financial instruments characteristics, Overview of financial markets and classification
- Recording business transactions, Assets, Liabilities, Concept of Revenue, Profit, cash flow and balance sheet

References:
3. www.nseindia.com

MS 5005 SPREADSHEETS FOR BUSINESS DATA ANALYSIS (0-0-3-1)

Objectives:
To impart basic skills in the use of spreadsheets for modeling and analyzing business data.

Contents:
- Fundamental concepts of spreadsheets, common functions in spreadsheets
- Relative and absolute addressing; named cell ranges; referencing by names
- Excel functions: math, statistical, financial, logical, lookup and reference functions
- Pivot tables and pivot charts, one-way and two-way data tables
- Goal seek
- Auditing spreadsheets; error trapping; evaluate-formula feature
Three-dimensional formulae and the table features

References:

MS 5010 MACROECONOMICS (4-0-0-2)

Objectives:
To enable the students to understand the macroeconomic environment and anticipate the forthcoming changes in fiscal and monetary policies that affect corporate performance. This course will also help the students understand the implications of government budgets on the economy and the corporate sector.

Contents:
- Introduction, issues, goals and approaches;
- Measurement of macroeconomic variables and their relationship;
- Aggregate demand, income and spending;
- Integrating goods market and money market and money supply;
- Determinants of equilibrium I, aggregate demand and supply;
- Labour market and determinants of aggregate supply;
- Monetary policy and fiscal policy;
- Growth theories;
- Micro foundations of consumption, saving and investment;
- Dynamics of inflation, employment and growth;
- Stabilization policy – debate on government intervention;
- Economics of government budgets;
- Business cycles.

References:

MS 5030 DATA ANALYSIS FOR MANAGEMENT (4-0-0-2)
Pre-requisite: MS 5003

Objectives:
Statistical inference is the process of inferring properties of the entire population using a subset of it, known as a sample. We introduce the concept
of sample and populations. We use quality control to introduce the concept of sampling distribution and standard error. Estimation of population parameters using samples is followed by introducing the theory of hypothesis testing. The concept of comparing variation is introduced in ANOVA. The objective of this module is to prepare the student to use estimation, hypothesis testing and ANOVA effectively in statistical modeling and analysis of business problems.

Contents:
- **Sampling**: Sampling theory; simple random sampling; central limit theorem; sampling distributions, Stratified random sampling;
- **Sampling Variation and Quality**: sampling distribution of the mean, Control limits and control charts for variation.
- **Estimation**: Estimation problems, point and interval estimates, confidence intervals: Interpreting confidence intervals and manipulating confidence intervals.
- **Hypothesis testing**: Null and alternate hypothesis; types of errors; level of significance; power of a test, Test concerning mean and proportion, sample size, Tests for difference between means and proportions
- **Analysis of Variance**: Chi-square test; One way and two –way ANOVA, Repeated Measures ANOVA.

**TEXTBOOK**


**References**:

**MS 5031 DATA ANALYSIS APPLICATIONS (2-0-0-1)**

Pre-requisite: MS 5030

**Objectives**: Regression models are among the most powerful statistical models used in business analysis. In this module, we introduce the student to the concepts of
regression by modeling dependent behavior and relationships among variables. We follow it with analysis of covariance. The objective of this module is to help students identify relationships, use predictive models and analyse correlations.

Contents:

- **Simple Regression and Correlation**: Linear relationships, Least square prediction, Regression Model, Inference in regression
- **Multiple Regressions**: Multiple regression model; Partial correlation, Correlation, Modeling interactions, comparing regression models.
- **ANCOVA: Analysis of Covariance**: Combining Regression with ANOVA
- **Time Series Analysis**: Decomposing a Time Series, Regression Models and Checking the Model.

TEXTBOOK


Casebook:


References:


MS 5040 FINANCIAL ACCOUNTING (4-0-0-2)

Objectives:

The course essentially aims at building up necessary and sound foundation of Managerial Accounting for two purposes – one, these foundations would be helpful to have a better understanding of other courses; and second, it would help the participants to master ‘the language of business’ and thereby to understand ‘the business better’.
Contents:

- The basic accounting model
  - Accounting as an information system
  - Recording business transactions
  - Measuring business income
  - Completing the accounting cycle
  - Accounting for merchandising operations

- Accounting for assets, liabilities and shareholders’ equity
  - Internal control systems, cash and receivables
  - Inventories
  - Fixed assets
  - Liabilities
  - Shareholders’ equity

- 3. Analyzing and interpreting financial statements
  - Financial statement analysis
  - Statement of cash flows
  - Statement of fund flow

- 4. Disclosure practices
  - Accounting disclosure practices in India
  - International accounting disclosure practices
  - Accounting standards

- 5. Financial forecasting

References:
2. S.K. Bhattacharyya and John Dearden; Accounting for Management, Vikas Publishing House Pvt. Ltd. Third Revised Edition,

MS 5050 MARKETING MANAGEMENT- I (4-0-0-2)

Objectives:
The course aims at developing a clear understanding of marketing concepts with due emphasis on developing application skills. As the foundation course in marketing management it seeks to give appreciation of important topics like segmentation, buyer behavior, marketing mix elements and marketing strategy

Contents:
Introduction
What is market orientation?
Delivering customer value & satisfaction
Strategic market planning
Growth opportunity analysis
Consumer markets and buyer behaviour
Business markets and buying behaviour
Indian (rural) markets: an overview
Analyzing industries and competitors
Market segmentation
Differentiation & positioning
Product life cycle
Developing new market offerings
Managing product lines and brand
Pricing
Managing integrated marketing communication
Direct marketing
Personal selling and sales management
Relationship marketing.

References:
1. Kotler, Philip; *Marketing Management*; Prentice Hall of India, New Delhi
2. Armstrong, Gary and Philip Kotler; *Principles of Marketing*, Prentice Hall of India, New Delhi

**MS 5060 SYSTEMS THINKING AND APPLICATION (4-0-0-2)**

Objectives:
The course is meant to familiarize students with the concepts, laws, tools and applications of Systems Thinking to model, analyze and solve real world problems characterized by their open ended, ill-structured nature.

Contents:

- The need for systems thinking
- Counter intuitive phenomena
- Problems: recognition and description
- Problems: conceptual representation and specification
- Systems structure: concepts and modelling tools
- Systems behaviour: concepts and modelling tools
- Systems control: simulation and policy analysis
References:

MS 5110 MICROECONOMICS (4-0-0-2)

This course will acquaint the students with basic tools and concepts of microeconomic analysis and their application to managerial decision making. Beginning with the study of market forces, price sensitivity and consumer behaviors, the next focus will be on firm production and cost analysis, strategic behavior of firms, government regulation and finally market failures.

Objectives:
- To understand the basic concepts of demand, supply and market
- To use simple economic tools for analyzing firms’ decisions/behaviour
- To develop a perspective on managerial decision making at a firm level.

Contents:
- Demand and supply framework, determinants of demand and supply, Nature of demand and supply curves their interaction in the market, Market equilibrium and price elasticity
- Effect of government intervention in the form of taxes/subsidies/ price restriction on the market, and the implications of consumer/producer welfare
- Difference in demand functions for consumer durables vs. non-durables, Intermediate products and services
- Theory of consumer behavior, Consumer preferences, Indifference curves, Budget constraint, Utility maximization and the derivation of the consumer demand curve, Expected utility maximization under uncertainty
- Theory of Production, Production functions, Cost functions and profit functions. Total, average and marginal product (and cost); Returns to factors and scale; input substitution; and the optimal factor/input combination - Short run versus long run decision making of firms.
- Derivation of the supply curve, Decision under uncertainty
- Market structures, efficiency and regulation, Market forms including perfect competition, Monopoly, monopolistic competition, and oligopoly.
• Pricing strategies of firms, cartels and collusion, Mergers and acquisitions, and government regulation in the form of price directives, taxes/subsidies, Antitrust action and competition policies, Market failures
• Economics of information including asymmetric information, Moral hazard, Adverse selection and implication of information failures, externalities due to spillover effects, and their internalization through corrective taxes/subsidies and enforcement of property rights.
• Public goods and the role of the government.

References:

2. *Managerial economics*, Peterson, HC and WC Lewis

**MS 5120 ORGANIZATIONAL STRUCTURE AND DESIGN (4-0-0-2)**

**Objectives:**
To familiarize students aspiring to be practicing managers with basic concepts and practices of structuring and designing organizations and their relevance in improving organizational effectiveness.

**Contents:**
• Introduction
• Concept of organizational effectiveness
• Dimensions of organization structure.
• Determinants of organization structure- Strategy, Size, Technology, Environment, Power and control.
• Organizational design-Organizational design options ;Choosing the right designs.
• Contemporary issues in organization theory
• Managing the environment;
• Managing organizational conflict and change;
• Organizational culture;
• Organizational evolution.

**References:**

MS 5121  INDIVIDUAL DYNAMICS IN ORGANIZATIONS  (4-0-0-2)

Objectives:
To provide students an understanding and knowledge of the complex nature of people related issues and problems and to enable them to apply Organizational Behavior concepts and theories in addressing organizational issues and problems.

Contents:

- **Introduction to OB**: Fundamental concepts of OB, Scope, Purpose, Emerging issues, Evolution of OB as discipline, Challenges and Opportunities before OB, Contemporaries issues in OB.

- **Organizational Justice, Ethics, and Corporate Social Responsibility**: Forms of organizational Justice and their effects, Ethical behavior, Beyond ethics: Corporate Social Responsibility.

- **Individual Differences: Personality, Skills, Abilities and Values**: Meaning, Theories of Personality, Types of Personality, Linking Individual’s personality to the workplace (P-O fit, P-J fit), Abilities and Skills (Intelligence, Physical and Social Skills), Importance of Values, Types of Values, Linking personality to values.

- **Attitudes**: Nature and dimensions of attitude, Types of attitudes, Prejudices, Job Satisfaction, Organizational Commitment, Job Engagement, Developing the right attitude.

- **Perception**: Perception and Attribution, Factors influencing perception, Link between perception and individual decision making.

- **Learning, Creativity and Emotions**: Learning through reinforcement, Continuous learning through creativity, Mood and Emotions, Types of emotions, The role of emotions and mood in organizations, Managing emotions, Emotional dissonance, Controlling anger, Emotional Intelligence, Emotional contagion.

• **Motivation:** Definition, Importance, Early and contemporary theories of motivation, Applications of motivation concepts, creating a motivation work setting, Linking employee involvement programs and motivation theories, Using rewards to motivate, How to motivate employees/professionals?

**References:**

**MS 5130 OPERATIONS RESEARCH**

**Objectives:**
This course deals with arriving at optimal or near optimal decisions for a given set of managerial objectives under various constraints. The objective of the course is to acquaint the students with the construction of mathematical models for managerial decision situations. The emphasis is on

- Understanding the concepts and interpretation of the solution rather than on the mathematical details.
- To be able to analyse decision problems in operations, and the relationships of operations decision to other business decisions.
- To develop both an ability to diagonalise the causes of operational problems and judgement to deal with them.
- To develop how the resources within the operations can be utilized to meet business objectives relative to product quality, customer service, time, cost and return on investment.

**Contents:**
- Introduction to modelling
- Linear programming problems: examples and formulation of problems in management
- Solution techniques
- Duality theory and sensitivity analysis
- Transportation and assignment models
- Integer programming problems: formulation and solution techniques
- Use of OR software

**References:**

MS 5140 COST ACCOUNTING (4-0-0-2)

Objectives:
This course is aimed at providing students with insight into using accounting information for decision-making and control.

Contents:


References:
- Bhavesh M.Paul, Cost Accounting or Management Accounting, Allied Publishers Ltd., New Delhi, 1997.

MS 5150 MARKETING TOOLS: STRATEGIES AND INNOVATION (4-0-0-2)

Objectives:
To help students understand the potential of the 4 main tools of Marketing – Product, Price, Place, and Promotion. The idea is to not just acquaint them with the terminologies used but to help them appreciate the strength and power of each of the 4 tools through industry examples, cases and live projects. The course would help prepare students for managerial roles by developing in them
the ability to use the marketing tools to improve and impact marketing and business performance.

Contents:
Understanding and identifying core and un-served needs of the target segment.

- **1st Tool – Product:** Product levels, classifications, portfolio – line and width decisions; Product Life Cycle – product, brand and category life cycles; New Product Development; Services Vs. Products. Brand and Product interaction – impact on image. Industry examples and cases to explain strategies and innovation

- **2nd Tool – Price:** Pricing, factors to be considered, Setting the price – alternative methods; Price and Value- customer interpretations, Psychology of pricing; Economics of pricing; Pricing in Marketing – necessity vs. luxury; Price differentiation; initiating and responding to price changes. Brand and Price interaction – impact on image. Industry examples and cases to explain strategies and innovation

- **3rd Tool – Place:** Marketing channels, Creating value networks; Channel roles; Channel development - customer needs, nature of product, control, etc. Hybrid channels, Channel integration – VMS, HMS; Managing channels and channel members. Brand and Place interaction – impact on image. Industry examples and cases to explain strategies and innovation

- **4th Tool – Promotion(communication):** Objective for developing an integrated marketing communication mix, Communication mix elements – advertisement, sales promotion, PR, direct selling, personal selling; Macro and Micro models of communication; steps in developing integrated marketing communication mix, message and media strategies – planning and scheduling; evaluating effectiveness. Brand and communication interaction – impact on image. Industry examples and cases to explain strategies and innovation

Text books:

References:
Objectives:
The course would aim at Appreciation of various aspects of effective oral and written communication, Understanding and application of communication theory to organizational situation, Sharpening of presentation and negotiation skills, Development of professional written business communication competence, Making use of group discussion abilities and making impact in interviews.

Contents:
- Semantics of communication
- Principles of communication
  - Model of communication
  - Forms of communication
  - Barriers of communication
- Process of communication
  - Characteristics
  - Listening
  - Feedback positive / negative
- Body language
- Presentation skills
  - Building content; Delivery
  - Platform behaviour and projection
  - Audio visual aids
- Letters / memos / proposals
  - Types
  - Structures
  - Contents
- Cv’s/ resumes
- Interviewing skills/group discussions
- Report writing
  - Types of reports
  - Abstracts; Summary
  - Errors of grammar and usage
- Negotiation skills.

References:
1. Arrendondo, Iani; *36 hour course : business presentations*; McGraw Hill
2. Hiltrop, Jean M. and Udall Sheila; *The essence of negotiations*; Prentice Hall
3. Kaul Asha; *Business Communication*; prentice hall

**MS 5210   LEGAL ASPECTS OF BUSINESS   (4-0-0-2)**

**Objectives:**

The purpose of the course is to create an understanding of the relevant legal environment of business.

**Contents:**

- Basic principles of the Indian Constitution – fundamental rights and directive principles.
- Sales Tax and central sales tax – Central Excise – Consumer Protection Act – only basic concepts.

**References:**


**MS 5221 GROUP PROCESSES IN ORGANIZATIONS   (4-0-0-2)**

**Objectives:**
To help students develop greater insights into the interpersonal and group/team dynamics and help them develop skills to improve inter – personal and team effectiveness.

**Contents:**

- **Foundations of Group Behavior:** Defining and classifying groups, Why do people form groups? Stages of group formation, Structural dynamics of work groups, Individual performance in groups (Social facilitation, social loafing), Group decision making, Types of decisions, Techniques for improving effectiveness of decisions.

- **Understanding Work Teams:** Concept of teams, Relevance, Difference between groups and teams, Types of teams, Potential obstacles to team success, creating effective teams.

- **Interpersonal Communications and Relations:** Communication process, Role of technology, Interpersonal and Organizational communication, Barriers to effective communication, Persuasive communication.

- **Leadership:** Definition, Importance of leadership, Roles of a leader, Leadership theory paradigms, traits of effective leaders, Leadership behavior and styles, Leadership and motivation, Contingency leadership theories and models, LMX theory, Charismatic and transformational leadership, Stewardship and servant leadership, Authentic leadership, Strategic leadership, Mentoring.

- **Influencing Others: Power and Politics:** Definitions, Sources of Power, Leadership and power, Power Tactics, Abuse of power (Sexual harassment), Politics: Powers in action, How do people respond to organizational politics, Forms of political behavior, Impression management, Trust in working relationships, Constructive and destructive workplace deviance (Whistle blowing, Cyber loafing), workplace aggression and violence, workplace bullying.

- **Managing Conflict and Negotiating Effectively:** Definition of conflict, The conflict process, Types of Conflict, Conflict Management, Cooperation between individuals, Managing conflict through negotiation, The negotiation process, Bargaining strategies, Cultural differences conflict handling and in Negotiations.

- **Organization Culture and Diversity:** Definition How is an organization’s culture transmitted to its members? Factors shaping organizational culture, Hofstede’s model of national culture, Competing values framework, Creating an ethical culture, The learning organization, Cultural diversity,
Diversity and Generational differences, Effectively managing a diverse workforce.

References:

MS 5230 OPERATIONS MANAGEMENT (4-0-0-2)

Objectives:
This course provides the students with an understanding of Operations Management as a functional area and its relevance in the management of a firm. Important topics such as forecasting, planning, scheduling and materials management are covered in the context of manufacturing and service operations. The course will have teaching sessions, tutorials, case discussions and computer-based games.

Contents:
- Introduction: Process selection; facilities, location and layout.
- Forecasting: Qualitative, time-series and causal models; monitoring forecasts and selection of forecasting model.
- Inventory Management: Deterministic and probabilistic lot-size models; selective inventory control.
- Materials Requirement Planning (MRP)
- Production Planning and Control: Aggregate planning and scheduling; Capacity Requirement Planning (CRP); Manufacturing Resource Planning (MRP-II);
- Just-in-Time manufacturing (JIT)
- Quality Management and Control: 7 Tools; sampling.
- Services Operations Management – A perspective.

References:

MS 5241 FINANCIAL MANAGEMENT I ` (4-0-0-2)

Pre-requisite: MS 5040: Financial Accounting; MS 5140: Cost Accounting;

Objectives:
The aim of this course is to provide a broad framework of corporate finance. It is designed to cover the concepts and applications pertaining to financing decisions of an organization, designing capital structure and measuring financial risk.

Contents:

Financial value

- Financial objectives of the firm – income – profit - value
- Time value of money – present value – future value
- Financial instruments – Debt – equity - derivatives
- Valuation of debt instruments – debt cash flows – bond yield
- Valuation of equity instruments – Dividend discount models – Relative valuation – efficient market hypothesis
- Cost of capital –opportunity cost of capital – marginal cost of capital – weighted average cost of capital
- Valuing a business-discounted cash flow method, comparable trades method, venture capital method
- Valuing options and hedging - basics

Financial Structure

- Corporate source of finance – long term – public issue – venture capital
- Leverage and financial decisions – trade-off theory – pecking order theory – financial leverage
- Designing capital structure – EBIT – EPS analysis – ROI – ROE analysis

Financial Risk

- Financial risk and return
- Measuring expected return – CAPM - beta
- Debt instruments credit risk
- Equity instruments and value at risk
• Efficient Market- implications of efficiency;

TEXT BOOKS:


References:


MS 5242 FINANCIAL ANALYSIS APPLICATIONS (2-0-0-1)

Pre-requisite: MS 5040: Financial Accounting; MS 5140: Cost Accounting

Objectives:
The purpose of this course is to provide exposure on financial analysis applications using case studies.

Contents:

Case studies in

• Financial Forecasting and valuation – asset based and discounted cash flow methods, Forecasting models, analyst forecasts
• Financial Statement analysis – Industry and company analysis
• Consolidated financial statement analysis and Analysis of inter-corporate investments
• Financial analysis of multinational corporations
• Cost control and pricing

TEXT BOOKS:

• Case studies

References:

**MS5251 RESEARCH FOR MARKETING DECISIONS**

(4-0-0-2)

**Objectives:**
The identification of market opportunities and analyzing the structure of markets under dynamic conditions are among the most important and exciting aspects of marketing management. Marketing Research is the body of knowledge consisting of a variety of concepts and tools that are used for this purpose. This course is aimed at developing the students’ awareness and understanding of Marketing Research through examples of applications in different industrial and business contexts.

**Contents:**
- Marketing Research - A Conceptual framework
- Case Discussion - (Relevance of Marketing Research)
- Research Planning, Design, and Data Sources.
- Qualitative Research.
- Exploratory Research.
- Causal Research.
- Measurement and Scaling.
- Questionnaire Design.
- Sampling Methods and Data Collection.
- Field Investigation – Planning, Implementation, and Issues.
- Data Analysis Technique - Univariate, Bivariate, Tabulation and Analysis.
- Multivariate Data Analysis and applications - Multiple Regression Analysis, Factor Analysis,
- Discriminant Analysis, Cluster Analysis, Conjoint Analysis.
- Organizational, Technological and Ethical Issues.
- Project Report Preparation and Presentation.

**References:**


MS 5260 MANAGEMENT INFORMATION SYSTEM (4-0-0-2)

Objectives:
The objectives of the course are

- To prepare the students to manage information systems used in their areas of responsibility and to cope with continual technology driven change
- To enable the students to identify ways to use IT in their areas of responsibility
- To enable the students to guide the development or acquisition of an IT application that is effective, flexible, and consistent with business directions
- To enable the students to have a vision of the future impact of IT on managers, organizations, the economy, and society.

Contents:
- Introduction to Information Systems
- Managerial Overview of IT
  - Computer hardware
  - Computer software
- Computer networks
- Data base management
- Internet and electronic commerce
  - Internet
  - Electronic commerce
- Intranets, Extranets, and Enterprise Collaboration
  - Intranets and extranets
  - Enterprise collaboration
- Developing information systems
- Information systems in functional areas
- Information systems for transaction processing
- Information systems for decision support
- Information systems for strategic advantage
- Managing information technology

References:

MS 5269 INFORMATION TECHNOLOGY LAB (0-0-3-1)

Objectives:
To introduce databases and analytical tools used in business management to MBA students

Contents:

- Relational databases, development in MS Access, Table structure, relationships, implementation
- SQL queries, Query implementation in MS Access
- Excel macros and their implementation
- Online Analytical Processing using SQL Server 2010
- Getting started with software packages for computing: SPSS, and R (open source), basic commands and instruction set, connecting data sources to the packages
References:


MS5320 HUMAN RESOURCES MANAGEMENT (4-0-0-2)

Objectives:
The course aims at introducing the students to various aspects of human resources management. The important functions of a human resources manager such as recruitment and selection processes interview methods, Performance appraisal, Training and development, disciplinary procedures, collective bargaining and employee welfare. The students will be exposed to the recent methods and trends in HRM with a few case studies in the context of globalization.

Contents:
- Strategic role of human resource management
- Job analysis
- Personnel planning and recruiting
- Employee testing and selection
- Interviewing candidates
- Appraising performance
- Managing careers
- Compensation
- Benefits and services
- Labour relations and collective bargaining
- Employee safety and health

References:

**MS 5330  SUPPLY CHAIN MANAGEMENT  (4-0-0-2)**

**Objectives:**
The course seeks to discuss key concepts and issues in the design, operation and management of supply chains. The course will have lecture sessions, tutorials and cases in Supply chain management related issues.

**Contents:**
- Introduction to supply chain management
- Sourcing strategy and vendor development
- Supply chain design issues
- Inventory management in supply chains
- Distribution and logistics management
- Global supply chain management
- Role of IT in supply chain management
- Performance evaluation

**References:**

**MS 5341  FINANCIAL MANAGEMENT II  (4-0-0-2)**

Pre-requisite: MS 5040: Financial Accounting; MS 5140: Cost Accounting;

**Objectives:**
The course aims to provide an understanding of investment decisions and working capital management. The process and issues involved in capital budgeting decisions, dividend policy decisions and working capital decisions are introduced to the students.
Contents:

Capital budgeting decisions
- Corporate project types – unequal lifetime – replacements
- Projected cash flows – free cash flows
- Techniques of evaluation – accounting rate of return – payoff period - net present value – internal rate of return
- Conflict in evaluation – NPV vs. IRR – modified IRR
- Capital rationing
- Sensitivity analysis

Dividend decisions
- Factors influencing dividend payment of a firm
- Dividend models – Walter – Gordon – Modigliani and Miller
- Dividend policy of a firm
- Alternate forms of dividend – bonus shares – stock splits - stock options – stock repurchase

Working capital management decisions
- Working capital cycle
- Inventory management
- Receivables management
- Cash management
- Financing Working Capital

TEXT BOOKS:

References:

MS 5350 BUSINESS RESEARCH METHODOLOGY (4-0-0-2)
Pre-Requisite: Data Analysis for Management

Objectives:
The objective of the course is to cover all aspects relevant to designing appropriate frameworks, selecting tools and techniques related to business research and also exploring avenues for conducting field research in the business world. The students would be exposed to different facets of business
research needs and equipped with adequate knowledge to formulate and execute business research plans.

Contents:


- **Measurement and Scaling Concepts:** Types Of Scales (Nominal, Ordinal, Interval, Ratio scales) - Mathematical and statistical analysis of scales - Three Criteria For Good Measurement (Reliability, Validity, Sensitivity) - Attitude Measurement.


- **Sample Designs and Sampling Procedures:** Sample Frames - Random Sampling and Non-sampling Errors - Probability Versus Non-probability Sampling - Appropriate Sample Design – Sample Size Determination.


Text book:


References:


**MS 5561 INFORMATION SYSTEMS ANALYSIS (2-0-3-2)**

**Objectives:**
This course deals with the body of knowledge that pertains to the process of identifying management information needs and then analyzing the corresponding organizational systems of data flow for the explicit purpose of designing appropriate MIS.

**Contents:**
- Systems analysis and design – an introduction
- The systems development life cycle
- Problem recognition and definition
- MIS project initiation
- Feasibility analysis
- Determination of system requirements
- Data and information system modeling
- Logical and physical system design
- Software quality and reliability
- System analysis and design documentation

**References:**
MS 6010  STRATEGIC MANAGEMENT  (4-0-0-2)

Objectives:

The purpose of this course is to provide an understanding of how strategic decisions are to be taken and implemented in the changing environment scenario.

Contents:

- Strategic management – concept of strategy – strategic management process.
- Strategy implementation – activating strategies, organization structure, functional plans and policies, corporate culture.
- Strategy evaluation – technique of strategic evaluation and control.

References:


MS 6210  BUSINESS MODELS  (4-0-0-2)

Objectives:

The objective of the course is to provide insights into business excellence frameworks, designing business models and the dynamics of business innovation. This course outlines holistic management of both established and
new firms through the integration of strategic perspectives related to marketing, financial, organizational and operational aspects. The students will be exposed to emerging theories in this arena to enable them gain a deep understanding of business models and their dynamic roles in the sustainability of business success with the aid of global case studies.

Contents:

- **Business Excellence Models:** Core values and concepts – Business Excellence frameworks of USA (MBNQA), Europe (EFQM) and India (CII-EXIM) – Cross-comparison of national frameworks.
- **Planning and Execution of Business Models:** Profit Models – VRISA analysis – Sources of competitive advantage – Critical success factors for planning and executing business models – Global case studies
- **Business Innovation:** Industrial perspectives on growth and innovation – Types of innovations – Managing product and process innovations – Managing disruptive innovations – Principles of value based management.

**Text books:**

**References:**

**MS5529 BEHAVIOURAL LAB**

**(0-0-3-1)**

**Objectives:**

Course intends to help students develop critical thinking skills—particularly skills relevant for effective behavioural analyses models, designs, interpretation and insights.

**Contents:**

- Behaviourism: Philosophy, Methodology, theory
- Social - Experiences and behaviours of the individual in the social world of relationships, media influences, group pressures and prejudices, and cultural and gender stereotypes.
- Organizational: Leadership, Performance management, Work and wellbeing; Employee relations, Selection and assessments, Gestalt, Group decision making; Organization Design, Culture, Power, Politics, Diversity
- The Biological Basis of Human Behaviour – Non-invasive Biometrics and Bio feedback systems. Assess critically the extent to which biological explanations can be used to understand or explain human behaviour and vice versa.
- Cognition–Perception, Information Processing, Cognitive styles, Social cognition, cognitive dissonance etc.
- Ethical Issues - Examine the use of human participants in the behavioural lab investigations, where the emphasis will be on the importance of following ethical guidelines, such as those provided by the APA.
- Students will be presented with models and empirical studies for critical evaluation in the above mentioned areas.
- Research methods - Nature of psychological and behavioural enquiry and the advantages and disadvantages of different research methods. Test battery, assessments, Unobtrusive behavioural observation, field studies, the design and implementation of experimental and non-experimental
investigations, quasi experimental designs, times series designs, factorial design, single subject research design etc will be investigated, by thinking about the selection, formulation and implementation of appropriate investigation designs

References:

MS 6280 INDUSTRIAL AND BUSINESS DOMAINS (2-0-0-1)

Objectives:

The knowledge of different industrial and business domains is essential to broaden the students’ professional perspectives. They develop a comprehensive and comparative understanding of the important issues facing managers in those domains. It enables them to appreciate the scope for and limitations of applying different concepts and techniques in various management functions across different domains. It also enhances their familiarity of managerial practices in those domains.

Contents:

Descriptions of various industrial and business domains, in India, in terms of:

- Output products/services;
- Market segments and sizes;
- Market potential;
- General uncertainties and major problems;
- Prevailing technologies;
- Major suppliers/sourcing agents;
- Leading firms, their strategies and performance characteristics in terms of finance, marketing, productivity, and quality, and other key organizational features;
- Future outlook.
The various industrial and business domains that will be described in this course will include:

- Core sectors - steel, oil, power/energy, construction, etc.
- Manufacturing - capital goods (non-electrical and electrical machinery and transportation equipment).

References:
Leading business periodicals, magazines, newspapers, and business websites

MS 6310 CONTEMPORARY ISSUES IN MANAGEMENT (4-0-0-2)

Objectives:

The objective of the course is to expose students to major interdisciplinary topics and emerging trends in the field of management theory and practice. It aims to familiarize them with new concepts and state-of-the-art methodologies concerning management philosophy and managerial decision-making. The course explores the issues and challenges pertaining to recent developments as depicted in research studies on business environments, models, entrepreneurship and competitive positioning of firms.

Contents:

- Philosophy of Management and Capitalist Philosophers.
- Emerging Trends in Functional Domains
- Art of Negotiation: Approaches, Tools and Techniques.
- Corporate Performance Management: Emerging Models.
- Business Ideas: Evolution and Execution.
- Technology as a Competitive Weapon.
- Corporate Social Responsibility and Business Ethics.
- Management and Spirituality.

References:

MS6370 STRATEGIC NETWORKING (2-0-0-1)

Objectives:
The Course will address various conceptual dimensions of corporate level networking and its applications to gain strategic advantage – in terms of an ability to identify and exploit opportunities and overcome threats in achieving corporate objectives.

Contents:

- Concept of networking.
- Different perspectives on networking – sociological, organizational theories, Development Administration, etc.
- Networking as a tool for corporate survival and growth.
- Experiences of different Indian Organizations.
- Political networks and lessons for the Corporate world.
- Product lifecycles and networking.
- Emerging Paradigms and Issues.

References:


ELECTIVE COURSES

HUMAN RESOURCE MANAGEMENT ELECTIVES

MS5410 TALENT ACQUISITION AND MANAGEMENT (4-0-0-2)

Objectives:
In a time of increasing global competition every organization is concerned about the level of work performance of its employees. Since performance of employees is a major determinant of how successful an organization is in reaching its strategic goals and developing a competitive advantage. This course will deal with various tools and techniques used in the selection process for acquiring the right talent for the organizations and how to manage these human resources.

Contents:
1: Overview and Models
   - Staffing-nature, Definition, implications, importance
   - Staffing models
   - Recruitment with a global perspective
   - Ethical Issues in Recruitment
2: Environmental Conditions
   - Economic conditions – changes and its impacts
   - Labor markets - Demand and Supply
3: Legal Aspects of staffing
   - Fair employment laws – EEO best practices
   - Labor unions – Contracts and their impacts
   - Recruiting from a diverse workforce
4: Strategy and Planning
   - Human Resource planning
   - Forecasting HR requirements and availabilities
   - Preparing Action Plans
   - External and internal environmental scanning
5: Job Analysis
   - Job analysis – Job descriptions, job specifications
   - Job analysis techniques
   - Competency based job analysis
   - Job rewards and job analysis-job reward matrix
6: Measurement
   - Importance and use of measures-Scores
   - Reliability and validity of measures
   - Specific use of measures in staffing
7: External Recruitment
• Common Practices- Traditional and Technology enhanced methods
• Campus Recruitments, job fairs, employee referrals
• Role of media in recruitment

8: Internal recruitment
• Organizational and administrative issues in internal recruitment
• Mobility paths , Succession Planning
• Communicating internal recruitment
• Glass ceilings
• Comparative analysis –internal Vs. Internal recruitment

9: Selection Tests
• Test Of ability and knowledge- Intelligent test, job Knowledge test, Performance Tests and work samples
• Assessment centers
• Medical examinations, Drug testing
• Tests of personality and character, Integrity tests

10: Interviews
• Nature and Purpose
• Types Of Interviews- Structured Vs Unstructured, Panel interviews, Virtual interviews
• Interview content- nature Of Questions
• Interviewer attributes and behavior

11: Employee Contracts
• Employee Contracts
• Job Offers – formulation, Presentation
• Preparing for induction
• Legal issues of job contracts

12: Evaluating Success of Selection
• Predictors and criteria
• Performance appraisal methods – Checklists, employee comparisons and graphic rating scales

References:
2. Employee Selection : Lilly M Berry – Thomas Wadsworth, 2004
MS 5420 TRAINING AND DEVELOPMENT (4-0-0-2)

Objectives:

This course analyses and discusses various training and development methods in organisation. It examines the training processes, which begins with the diagnosis of training needs and establishment of pure objectives pertaining to programmes. This module will discuss various issues on the design and the delivering of training programmes that use appropriate methods and procedures to maximise the leaning and subsequent job performance of trainees. It will also discuss on various training programmes, which are evaluated to see whether they meet the objectives and are cost effective.

Contents:

1. Scope and cost of human resource development - a systems model to training, strategy and HRD, building employee commitment; orientation and socialization.
2. Need assessment - purpose and methods of need assessment, three levels of need assessment, identifying training objectives.
4. Evaluation phase - evaluation levels and purposes, evaluation designs, using evaluation to improve training, utility of training programmes, benchmarking HRD.
5. Human resources development in the future - small business applications; training, training for special purposes, global HRM training, information technology and HR training.

References:


MS 5430 INDUSTRIAL RELATIONS (4-0-0-2)

Objectives:

Industrial relations play a crucial role in establishing and maintaining industrial democracy. In India it has passed through several stages. A number of factors, viz., and social, economic and political have influenced industrial relations.
Contents:

Industrial unrest leads to loss of man, days and productivity of organisations. The government had played a dual role – one as the initiator of policy and the other as an employer or owner by setting up large public sector organisations.

Industrial relations provide the basics of industrial democracy, dispute settlements and collective bargaining in organisations.

- Indian industrial relations – an overview
- Indian industrial worker
- Trade unionism
- Origin and structure of trade union
- Trade Union Act
- Evolution of industrial relations
- Industrial Disputes Act 1947
- Industrial Employment (Standing Orders) Act 1946
- Payment of Bonus Act 1965

References:


**MS5440 LABOUR LAW (4-0-0-2)**

Objectives:

Fundamental rights and directive principles of state policy incorporated in our constitution strive to attain socialistic equalitarian society, free from socio-economic oppression and exploitation. The various legislative measures taken by the government towards the healthy industrial jurisprudence with the growth of industrialization, especially during and after the first world war, the conditions changed. First India emerged as one of the eight industrial powers of the world and there was steady increase in the ranks of industrial employees. The course will provide the inputs to various industrial laws viz. Standards and norms and welfare and amenities legislations.
Contents:

- Industrial legislation
- Growth of industrial labour force, characteristics of industrial labour

References:


**MS5450 INTERNATIONAL HUMANRESOURCE MANAGEMENT**

(4-0-0-2)

Objectives:

With globalization on the rise, organizations are facing increasing challenges in terms of effectively managing their human resource on an international scale. This course would therefore attempt to familiarize students with these challenges facing multinational and transnational corporations today in operating on a global scale, the human resource policy choices that confront multinational enterprises, and factors to be considered in making those choices. This course would benefit students wishing to specialize in Human Resource Management and Organizational Behavior. The pedagogy would comprise of a mix of interactive classroom lecture sessions, case discussions and presentations.

Contents:

- Introduction to International Human Resource Management: approaches to IHRM, variables moderating differences between domestic and international HRM, organizational context, cultural profiles and challenges, HR and expansion strategies.
- Strategic human Resource management in a global context
- International recruitment and selection
- Performance management of expatriates and foreign subsidiaries
- Training and development
- Compensation modules
- Repatriation
- labor and employee relations
- Issues, challenges and developments in IHRM, global and cultural diversity

References:


MS 5460 COMPENSATION MANAGEMENT (4-0-0-2)

Objectives:
The objective of this course to equip students with an understanding of compensation management approaches including systematic Performance Management (PM). This subject covers the main elements of compensation management and its relationship with the strategic role of human resource management. Performance management and its relation to employee and its organization performance will also be discussed.

Contents:

- Overview of compensation - strategic role of compensation in human resource system, the importance of compensation, factors influencing effective compensation.
- Compensation process - employee satisfaction and motivation issues in compensation, developing salary structure, elements of compensation, executive compensation
- Performance management framework - definition and coverage, reason for undertaking PM, PM process, linking pay to performance
- Planning of performance management - establishing individual/team objectives, job analysis and its process, establishing internal equity; job evaluation methods, setting performance standards
- Managing performance management - coaching and counseling, feedback and day-to-day planning of meetings, motivation, self-monitoring, monitoring training and development activities
- Reviewing of performance management - formal review of performance, performance measurement
- Rewarding performance - financial rewards, non-financial rewards, administering compensation systems
References:


MS 5470 STRATEGIC HRM AND GENERAL CULTURAL ISSUES

(4-0-0-2)

Objectives:

In their continuous quest for sustainable competitive advantage, the central question facing most organizations today is how to reduce, if not eliminate, the lag between the emergence of new strategies and structures and their appropriate human resource management systems. The expectation therefore is that HR executives take on more of leadership roles than before, in driving the strategies of their organizations, rather than restricting their roles to being merely followers. Strategic Human Resource Management (SHRM) offers a look at the critical role of how managing human resources is a value - adding proposition in the achievement of organizational goals and objectives. Each human resource function must be aligned with the organization’s strategies. This course is designed to offer tools that lift thinking to a higher level culminating in processes that lead to an integrated approach between human resources and the organization.

Contents:

- Introduction: Strategic Partnership Model; strategic value of human assets
- Investment perspectives of HR and the human resource environment; strategy implementation
- Rewards and development systems; performance evaluation and HR impacts
- Strategic uses of change management
- Strategic renewal : downsizing / mergers and acquisitions / restructuring
- Internal and external fit in SHRM systems
- Crafting strategic HR systems: SHRM measurement
- Multinational SHRM
- Role of formal HRM under SHRM
References:


**MS 5471 MANAGING WORK TEAMS (4-0-0-2)**

Objectives:

Work teams have become an integral part of organizations today. In this context this course will sensitize students on the dynamics of work teams. The key objective of the course is to help the students understand factors which affect work team performance and thus manage them effectively.

Contents:

- **Introduction to work teams:** Definition of work teams – How work teams are different from other teams - Different types of work teams – Theories on work teams.

- **Factors affecting team performance:** Interpersonal factors – Task related factors – Technological factors – Temporal factors

- **Team Dynamics:** Conflict in teams – Group think – in-group Vs out-group behaviours.

- **Managing a team:** being a team member – being a team leader – HR issues in managing a team.

Text books:


References:


MS 5472 LEADERSHIP DEVELOPMENT (4-0-0-2)

Objectives:  
Leadership is one of the most salient aspects of the organizational context. It is a complex process by which the leader influences others to perform and achieve. The leadership attributes – belief, values, ethics, character, knowledge, and skills – are all traits which can be learned. The course is designed to discuss several important aspects of leadership in a comprehensive manner. Course will also expose students to some of the central ideas and frameworks in leadership and helps them to understand how to apply these ideas and frameworks to analyze managerial and organizational situations.

Contents:

- **Nature & Importance of Leadership:** Definition and the Leadership Grid; Leadership theories, styles and Behavior; Leadership and Major motivational theories  
- **The Leader:** Character and integrity; Ethics and Values; Building excellence; Emotional intelligence; Leadership traits; Influencing team/organizational culture  
- **Developing Team Work:** Team building process; Team leadership; Facilitation; Mediation; Negotiation; The Team Leader as a facilitator, mediator & negotiator  
- **Communication, Conflict and Coaching:** Communication skills and styles; Conducting effective meetings; Managing Conflict; Coaching & mentoring; Coaching for performance; Skills Audit; Giving feedback;  
- **Power, Politics and Leadership:** Working with politics and power; Influence and Persuasion; Factors that contribute to political behavior; Exercising control over dysfunctional politics.  
- **Strategic Leadership:** The nature of strategic leadership; International and culturally diverse aspects of leadership: Leadership and diversity; Leadership and change; Creating High performance culture; Leadership and the organization
References:

4. Selected papers from refereed journals.

MS 5473 ORGANIZATION DEVELOPMENT (4-0-0-2)

Objectives:
This course treats the contemporary theory and practice of organization development while also focusing on the role of organization development in anticipating and effecting change in organizations. The course examines the organization diagnostic & development process, intervention strategies, and the role of organization development in creating the changes that improve individuals, teams, and organizations, roles & styles of OD practitioners

Contents:

- **Overview of Organizations and Systems:** Understanding organizations; diversity of organizations; organizations as open systems; Overview of the field of organization development;

- **Collaborative Consulting:** Collaborative and OD consulting; Maintaining Professionalism; Yourself as an instrument of Change; Trust, commitment and collaboration with Clients; Administrative skills; staying grounded and centered

- **Values, Assumptions and Beliefs in OD:** OD components; Chronology of events in Management and organization thought; early statements of OD values and assumptions; Implications of OD values and assumptions.

- **Theory and Management of OD:** Action research and Organization Development; Action Research Diagnostic Phases; Action Research Implementation Phases; Managing the OD process;

- **OD Interventions:** OD interventions-An Overview; Team Interventions; Intergroup and Third party Peacemaking interventions; Comprehensive interventions; Structural interventions; Training Experiences
- **Performance, Change and Learning**: Performance management; Organizational Change and capacity building; evaluation of performance and change; cultivating and guiding learning

- **Collaborative Consulting Cycle**: Clients start up; Engagement and Agreement; Discovery and feedback; Action Planning, Alignment and Integration; Implementation and Change Management; Adoption and evaluation; Project termination

- **Key Considerations and Issues**: Issues in Consultant – client Relationships; System Ramifications; Power, Politics and Organization Development. Research on Organization Development; Future and OD

**References:**


**MS 5474 HR IN MERGERS AND ACQUISITIONS (4-0-0-2)**

**Objectives:**
Mergers and acquisitions (M&A) are increasingly being used by firms to strengthen and maintain their position in the marketplace. While most M&A research focused on the financial and strategic issues, more recent literature is focusing on the human resources (HR) aspect of M&A.

Today, it is widely accepted that the way HR issues are handled is critical to the success of any M&A and management of the human side of change is the real key to maximizing the value of a deal. Most M&A failures can be traced to poor support of HR-related issues and activities, human resources issues being neglected or HR not playing a critical role in the process. As the Indian industry opens up to the global competition, we are witnessing a spate of such mergers, acquisitions, and strategic alliances for corporate restructuring and renewal. It is in this context that this course is being offered. Though M&A’s is highly multi-dimensional, course highlights the human aspects and people side of mergers and acquisitions.
Contents:

- **Introduction:** A Brief History of Mergers and Acquisitions, Why Companies Merge and Acquire, Merger and Acquisition Lifecycle, Why Mergers fail

- **HR function and role change:** M&As as change makers. Factors influencing the role of the HR function: The Outer context, The Inner context: Organization factors, Individual factors, Merger specific influencing factors

- **Frameworks for HRM:** Tysons and Fells Building Industry, Storey's Personnel Practitioners, Monks Personnel Management, Ulrich's multiple role model etc

- **Strategic fit between M&As and HRM:** HR Leadership, HR Due Diligence, Organization structure, integration planning, Over capacity M&As and Downsizing, Staffing and Selection, Retention, Communication, Transition Teams, Cultural clashes and the acculturation process, Change management, HRM processes, Resources, Values.

- **Critical HR issues:** pre-combination, integration, and post-integration.: Pre-Combination: HR Issues, HR Implications and Actions; Combination - Integrating the Companies; HR Implications and Actions; Solidification and Assessment of the New Entity: HR Issues and HR Implications and Actions

- **Integration levers and components**

References:

In present-day India, with its increasing focus on globalization, business success requires intercultural awareness and effective cross cultural communication skills. In addition to the normal pressures of people-management, managers are now required to deal with challenges, friction and misunderstandings emanating from cross cultural differences. Understanding and appreciating intercultural differences ultimately promotes clearer communication, breaks down barriers, and strengthens relationships and yields tangible results in terms of business success. This course aims to provide an overview and practical skills in the cross-cultural management and cross-cultural business communication, through an understanding of how culture affects workplace dynamics.

Contents:
- Cultural orientation. G. Hofstede, Trompenaars, Globe cultural dimensions. Implications for the manager.
  - Stereotyping in cross-cultural management.
  - National culture and organizational culture.
  - Leadership in cross-cultural management.
  - Culture and organizational structure.
  - Motivating across cultures.
  - Culture and conflict. Conflict management.
- Culture and planning.
- International staffing policy. Intercultural team-work.
- Expatriates culture shock and methods of cultural adjustment.
- Multicultural business- Regional specific.

References:

MS5490 MANAGEMENT OF CHANGE AND TRANSFORMATION (4-0-0-2)

Objectives:
To enable the participants
- Understand the forces of change in organizations
- The need for effective management of change process
- Develop knowledge and skills to design and implement change processes in organizations

Contents:
- **Unit 1:** Environmental context of organizations
  Forces of change
- **Unit 2:** Need for effective management of change
  Process steps in the management of change
- **Unit 3:** Frameworks for organizational analysis
  Organizational growth stages
- **Unit 4:** Appreciative inquiry in facilitating change
  Designing and implementing change
- **Unit 5:** Behavioural dimensions of change process
  Understanding and managing resistance to change
- **Unit 5:** Role, types and competencies of facilitators of change
  Seminal works of change management – Participants will take up an assignment on a seminal book/concept relating to management of change

MS 5500 PERFORMANCE MANAGEMENT (4-0-0-2)

Objectives:
- Develop skills for managing performance of employees i.e. appraising, Compensating & developing employees
- Appreciate Reward & Performance management in the context of the organizational Objectives
At the end of this course, the students should have a greater understanding of basics of RPM and its applications at the work site

Contents:

- **Performance Management – Definition, concerns. Scope and its linkage with other HRM Systems**

- **Elements of Performance Management**
  - Defining Performance, Facilitating Performance and Encouraging Performance
  - Setting Goals & Targets
  - Responsibilities before, during, after Performance & Development Planning
  - Individual, team and organizational performance linkages

- **Designing PMS- {MBO, BSC. Policy Deployment}**

- **Monitoring and Appraising Performance (Performance Appraisal)**
  - What is Performance Appraisal
  - The Performance Appraisal system
  - Performance Appraisal Methods
  - Errors and Biases in Performance Appraisal
  - Reducing biases / errors
  - Features of an effective system
  - Performance Counselling

  (What is it, What to do, what not to do)

- **Compensating Performance – Reward Management**
  - Performance management and compensation strategies
  - What is compensation
  - Designing compensation systems
  - Compensation and dimensions
  - Legislation and compensation
  - Job analysis, Job description, Job evaluation techniques
  - Compensation surveys, Compensation policies
  - Designing pay structures
  - (Pay policy line, Pay grades, broad banding)
  - Pay for performance / Pay for knowledge Seniority / Merit
  - Incentives and benefits.
Text books:


References:

1. Appraising & Developing Managerial Performance-.T. V. Rao, Excel Books
2. 360 degree feedback & assessment & development Centres, Volume I, II and III, TV Rao,et al., Excel Books
4. Performance Management, Michael Armstrong and Angela Baran, Jaico Publication

MS 7460 CORPORATE SOCIAL RESPONSIBILITY (4-0-0-2)
AND MANAGERIAL ETHICS

Objectives:

- To help students understand the impact of business on society, politics and ecological environment.
- To sensitize students on the importance of socially responsible business practices for sustained business performance.
- To help students understand the basic concepts in business ethics and thus recognize the ethical implications of their business decision in future.
- Help students aware of ethical dilemmas they might encounter in their future career and to understand the role of their personal values in resolving those dilemmas.

Contents:

- The social context of business
- Corporations and their impact on the social, political, ecological environment
- Corporate Social Responsibility and Organizational Performance
- Theoretical approaches to Corporate Social Responsibility
- The stake holders approach to business
- Business ethics and Management
- Personal and organizational ethics
- Morality, personal values in the work place
- Factors affecting ethical decision making
- Understanding and resolving ethical dilemmas
- Mechanisms to improve business ethics in organizations
References:

OPERATIONS MANAGEMENT ELECTIVES

MS 5510 LOGISTICS AND DISTRIBUTION MANAGEMENT  (4-0-0-2)

Objectives: The purpose of this course is to provide an understanding of the issues in modeling logistics and distribution in industry.

Contents:
- The factors governing the location of Distribution Centers: Qualitative and quantitative factors in the context of strategic, tactical and operational issues.
- Modelling of Distribution Centre (DC) Location: Optimization of DC locations using mixed integer programming; heuristic methods.
- Vehicle Routing, Minimum Spanning and Travelling salesman problems: Optimization algorithms and heuristic methods.
- Analysis of Logistics Management: Qualitative factors in logistics management by road, sea and air in the national and international arena.

References:
2. Shapiro, Jeramy. Modeling the Supply Chain, 2001, Duxbury Thomson Learning, Pacific Grove, California, USA.

MS 5520  SIMULATION MODELING AND ANALYSIS  (4-0-0-2)

Objectives: By the end of the course, students will be able to: Define and describe simulation systems; Interpret and infer from simulation systems; Build simulations models for optimization.

Contents:
- Systems and Modelling: Systems, sub-systems, parameters, variables, measures of performance, and types of models.
- Introduction to simulation: Qualitative and quantitative simulation
• Introduction to sampling: Sampling from historical data, empirical distributions and statistical distributions

• Applications of simulation: Study of inventory system, project network, replacement model, production and operations scheduling, supply chain, and queuing system; development of business games.

• Design of simulation experiments: Analysis of transient and steady states, and run length; variance reduction techniques; use of statistical tests for output data analysis.

• Use of simulation software.

References:

MS 5540 MANUFACTURING SYSTEMS MANAGEMENT  (4-0-0-2)

Objectives:
This course aims at introducing concepts in Manufacturing Systems Management through examples, problems and case studies. The emphasis is more on recent trends and thinking in the design and operations of manufacturing systems such as Cellular Manufacturing, Flexible Manufacturing and Synchronous Manufacturing. The emphasis will be more on applying the concepts rather on the theory behind these concepts. The topics to be covered are:

Contents:
• Types of Manufacturing Systems
• Cellular Manufacturing Systems – Issues in Design
• Production Flow Analysis
• Quantitative Algorithms for cellular manufacturing systems
• Operator Allocation and planning issues
• Product Ownership based design
• Flexible Manufacturing systems – Design issues and algorithms
• Synchronous Manufacturing – Concepts
• Synchronous Manufacturing – Applications and extensions
• Agile Manufacturing
References:


MS5550 OPERATIONS RESEARCH APPLICATIONS (4-0-0-2)

Objectives:
This course introduces the students to selected applications and recent tools of Operations Research. The applications of Operations Research are varied, ranging from Manufacturing to Services and the Social Sciences. Important applications are chosen from the various management, functional areas and are discussed. For each application, the various tools and techniques used, the relevant literature, the different variants of the problem are discussed. The stress will be on the adaptation of the tools and techniques of Operations Research for the application, more than understanding the functional area. Where relevant, cases and computer solutions will be discussed pertaining to the application.

Contents:
A suggested set of applications is given below. The applications can change based on recent developments from time to time.

• Vehicle routing problem - Applications in Distribution and Logistics - Types of VRP - Exact Solutions using TSP and heuristics using savings method - Case Study and Application.

• Bin packing problem - 1d, 2d and 3d problems, Algorithms and algorithms, Applications.

• Resource Constrained Project Scheduling - Formulations and heuristics, Applications

• Portfolio Optimization - Quadratic Programming - Lagrangean Multipliers.

• Conjoint Analysis - Applications in Marketing - Linear Programming models for preference estimation.

• Data Envelopment Analysis - Linear Programming models - Applications in Health care industry

• Crew Scheduling and Rostering - Linear and Integer Programming - Applications in Airline Industry - Case study and Real-life application.

References:

envelopment analysis to program follow through. Management Science, Vol. 27 No. 6, 668-697,


MS 5560  SERVICE OPERATIONS MANAGEMENT  (4-0-0-2)

Objectives:
This course discusses the various issues in the strategic, tactical and operational aspects of Service Management. Of late, with distribution and logistics gaining importance and third party service providers being available for all activities, service operations management is gaining importance in the overall success of any business.

Contents:
- Nature of services
- Focus of Service Management
- Globalization of services
- Service strategy
- Technology and Impact on services
- Locating facilities
- Managing demand and supply in services
- Service Quality
- Service Productivity
- Tools for service management

The course will involve case discussions, assignments, internet exercises and student presentations.

Reference:

MS 5570  HEURISTICS FOR DECISION MAKING  (4-0-0-2)

Objectives: This course provides insights on various heuristics and its applications in different functional areas of management.

Contents:
Introduction to conventional search techniques: Random search, simple dimensional search, steepest ascent/descent search, and greedy search.
Introduction to meta heuristics: Simulated annealing, tabu search, genetic algorithm, artificial neural network and ant-colony algorithm.

Applications of heuristics to –

- Production Management: plant location and layout, demand forecasting, aggregate production planning, and production scheduling.
- Operations Management: study of issues in supply chains, involving location and capacity determination of suppliers, manufacturing plant, distribution centers and retail points.
- Financial Management: capital budgeting, forecasting share prices and valuation of securities.
- Manpower Planning.

References:


MS 6230 STRATEGIC SOURCING (4-0-0-2)

Objectives:
This course describes and offers insights on the transformation from functional sourcing or purchasing to strategic sourcing. It will be useful for students to understand:

- Dramatic change of purchasing into world class supply management
- Various strategic decisions for outsourcing, supplier selection, evaluation and development.
- The role of communications, electronic exchanges, global markets and Internet in sourcing process design

Contents:

- **World class supply management** - Imperatives, evolution of strategic sourcing; Supply chains and networks; Supply management’s role in business and its impact on bottom line; Strategic supply management alliances.
- **Total Cost of Ownership (TCO) and strategic cost management** - Components of TCO; Price and cost analysis; Discounts and contract compensation arrangements.
- **e-Commerce: negotiation and bidding** - e-Commerce as an enabler: EDI and ERP; B2B exchanges; Online negotiations and reverse auctions.

- **Outsourcing and managing suppliers** - Make or buy decisions; Strategic issues in outsourcing; Supplier selection (bidding and negotiation); Supplier evaluation and development; Single sourcing versus multiple sourcing; Supply base reduction.

- **Supplier relationship management and Global supply management** - Supplier relationship and contract management, incentives, innovation and supply risks; Supply channels and global trade Intermediaries; Currency and payment issues.

- **Analytical models** - Supplier selection; Supplier evaluation; Supply base optimization; Supplier performance index; Supply contracts.

**Text books:**


**MS6030 ADVANCED DATA ANALYTICS FOR MANAGEMENT**

(4-0-0-2)

**Objectives:**
To develop strong data analytic skills using a case based approach to apply data mining and advanced statistical techniques to business problems. Examples from finance, marketing, operations management and HR will be discussed.

**Prerequisites:** First course in Basic Statistics.

**Pedagogy:** A mixture of analysis based on cases and examples.

**Contents:**

- **Data Visualization**— Understanding business scenarios by analyzing patterns in data. Would cover linear patterns, curved patterns, Normal models, linear models and nonlinear models. Visualizing higher dimensional data.
• **Decision Trees and Value of information**: Review concepts from probability and discuss construction of decision trees. Applications include use of decision trees to evaluate options.

• **Classification**: General approach to solve a classification problem. Evaluating performance of a classifier. Rule based classification, nearest-neighbor classifiers and Bayes classifiers. Applications include Anomaly detection, fraud detection in credit card etc.

• **Maximum Likelihood estimation and application to management**.

• **Dimensionality Reduction**: Principal component analysis, Singular Value Decomposition, Factor Analysis, Multidimensional scaling and cluster analysis

• **Multiple Regressions**: Multivariate Linear Regression and Statistical Inference in multiple regressions.

**References:**


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**MS 7200 GAME THEORY – I**

(4-0-0-2)

**Objectives:**
Introduction to formal treatment of games. This should help us appreciate the importance of information in decision-making, Emphasis of applications of game theoretic principles to model various problems.

Prerequisites: No formal prerequisites required. Aptitude for logic would be very helpful.

**Contents:**

• **Introduction** – what is a “game”? different forms of games, history

• **Terms and definitions** – extensive and normal form of games, strategies (pure and mixed), dominance, rationalizability, Nash equilibrium

• **Static games with perfect information** – Cournot competition, Bertrand duopoly model, Pareto optimality, Proof of existence of Nash equilibrium
• *Dynamic games with perfect information* – multi-stage games, sub-game perfection, backward induction principle and its applications (advertising and competition), Chain-store paradox, repeated games (reputation games), Folk theorem

• *Static games with incomplete information* – Bayesian games, perfect Bayesian equilibrium, Contracting risk and incentives, Job market signaling and schools

**Text Book:**


**References:**


**MS 8200 GAME THEORY – II**

**Objectives:**

Emphasis would be on the theoretical basis for game theory. Also, advanced topics and applications of game theoretic principles shall be discussed.

At the end of the course, the student is expected to know important theoretical results in the area and also will able to apply the theorems in practical applications.

**Contents:**

- *Static games with incomplete information* -- mechanism design, auctions, efficiency theorems

- *Dynamic games with incomplete information* – game trees, sequential equilibrium, perfect Bayesian equilibrium for repeated games

- Sequential bargaining under incomplete information – price discrimination, price offers from informed player

- *Games of asymmetric information* – moral hazard, optimal contracts, efficiency wages, adverse selection

- *Signaling games*
Text book:


References:


MS 8500 STOCHASTIC MODELING AND APPLICATIONS – I

(4-0-0-2)

Objectives:
This is a first course in stochastic processes and their applications. Through this course, we hope to explore: Building blocks of stochastic processes; Modeling problems from various areas (specifically operations and finance) using stochastic processes.

Contents:

- Random variables, Conditional probability and Conditional expectation
  Review of probability basics; Baye’s theorem; Computing probabilities and expectations by conditioning; Applications and examples

- Markov chains
  State definition, transition probabilities; Chapman-Kolmogorov equation; Steady state probabilities Applications and examples

- Continuous time Markov chains
  Birth-death processes; Limiting probabilities; Applications and examples

- Renewal reward theory
  Renewal reward processes; Insurance ruin problem; other applications and examples
  Brownian motion process and financial option pricing

- Hitting times; Gambler’s ruin problem; Geometric Brownian motion process; Pricing stock options

Text Book

References:


MS 8510 STOCHASTIC MODELING AND APPLICATIONS – II
(4-0-0-2)

Objectives:
By the end of this course, students will be able to: Define building blocks of a financial model using theory of stochastic processes; Evaluate a given financial model using stochastic calculus; Design and develop stochastic models

Contents:

• Queuing models
• Exponential models; Queuing networks; Priority queues; Multi-server queues; Applications and examples
• Stochastic processes in finance
• Arbitrage pricing; Capital asset pricing
• Martingales
• Definition, Sub- Super- Martingales, Optional Sampling Theorem, Applications to finance
• Stochastic Dynamic Programming
• Review of deterministic DP, Value iteration, Policy iteration, Applications in operations management

Text book:


References:

FINANCE ELECTIVES

MS5610 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT
(4-0-0-2)

Objectives:
The course introduces security research technique as well as security valuation methods. The lectures, projects and cases require use of computer based technical tools.

Contents:
• Corporate bonds – types – characteristics – determinants of discount rates.
• Shares – types – characteristics – determination of issue price.
• Security market indexes.
• Risk and factors influencing security risk – short positions – hedging – abridge.

References:
Objectives:
The objective of this course is to help the student understand the interrelationships between different financial decisions and the impact that such decisions have on firm value. The course would help the student to gain insights into the interrelationships among financing, capital budgeting, liquidity management, accounting, capital restructuring, and actual production and capacity decisions. This course would also internalize the learning from the fundamental finance and other courses taught during the 1st year of the MBA program by moving away from a problem solving approach to real world decision making situations.

Contents:
The course would use a multiple period decision making simulation setting in which students would make a variety of financial decisions. The key aspects of decision making would be:

- Establishing a management plan
- Developing Pro Forma financial statements
- Cash and liquidity management
- Capital budgeting analysis
- Capital structure decisions
- Dividend policy
- Discount on receivables
- Pricing strategy
- Production and advertising decisions
- Integrating the set of decisions

TEXT BOOKS:


References:

MS 5612 REAL OPTIONS VALUATION FOR STRATEGIC (4-0-0-2) INVESTMENTS AND DECISIONS

Objectives:
The objective of this course is to expose the students to the use of techniques that are used in options valuation in real world business decisions. This course would provide the students exposure to analytical skills that help in analyzing capital investment decisions using an options framework. In addition, the course would also introduce the students to look at stocks and bonds as options, and use options techniques in valuation of corporate financing instruments such as warrants, convertible debt, etc.

Contents:

- **Introduction to real options analysis**: Traditional options analysis, drawbacks in using traditional valuation methodologies, the basics and fundamental essence of real options, the importance of real options, and comparing traditional approaches with real options
- **Application of financial options concepts**: Essential option concepts, applying financial option concepts to real options, Black-Scholes and binomial valuation models
- **Different real options models**: Option to abandon, option to expand, option to contract, option to switch, option to activate, option to choose, simultaneous compound options, and sequential compound option, use of case studies and situations to illustrate the various option models
- **Valuation process**: Monte Carlo simulation, binomial lattice, volatility estimates, optimization techniques, introduction to software tools for real options
- **Use of options to value financial instruments and structures**: Firm expressed as put and call options, warrants and convertible instruments, Pricing and valuation of convertible bonds

Text books:


References:

MS 5613 CORPORATE HEDGING STRATEGIES (4-0-0-2)

Objectives:
This course intends to introduce students to identify and measure business risk. The focus is on the methods used by firms to hedge risk and strategies for transfer and control of business risk. The students will be prepared to select appropriate risk management tools, issues involved in implementation of the selected strategies and monitor the hedge outcome to ensure value creation in business.

Contents:
- Quantification and evaluation of VaR - Delta hedging, Gamma hedging, Vega hedging, Theta hedging, Rho hedging and hedging a combination of risks - Hedge accounting – Implication of tax on hedge.

TEXT BOOKS:

References:

MS 5614 COMMODITY MARKET (2-0-0-1)

Objectives:
The purpose of this course is to provide an understanding of the characteristics of commodity market, trading in commodity exchanges and pricing and valuation of commodity futures, and overview of various commodity derivatives market

Contents:

- **Commodity Market Characteristics**

- **Trading in commodity Spot and Futures Market**

- **Commodity Derivatives Market**
  Commodity derivatives- crude oil derivatives, agricultural, forest and livestock derivatives, metal derivatives – Power derivatives, Weather derivatives, Carbon derivatives, Derivatives on freight, water, Property and payroll - Commodity Spread, Options, SWAPs and Futures- ETFs.

References:

**MS 5615 TREASURY MANAGEMENT (4-0-0-2)**

**Objectives:**

The aim of this course is to introduce the basics of treasury management in corporate and banking sector. The scope includes managing cash, how to use treasury instruments for mitigating financial risk, banking regulations and payments processes in treasury operations.

**Contents:**

**Module A: Basics of Treasury management function**

- **Role of Financial Markets and Financial Regulatory Environment**
- **Treasury /market risk fundamentals**: Treasury risk-market risk-credit risk –Liquidity risk
- **Scope and functions of treasury management**: Treasury and its relationship to the organizational finance function- Positioning treasury in the organizational structure - Treasury controls & centralization - Treasury outsourcing

**Module B: Cash management**: Forecasting Cash and liquidity management

- **Cash Transfer methods**: Check payments - Automated clearing house (ACH) payments - Cash payments - Cash transfer: Types, controls & procedures.
- **Liquidity Management**: Rationalities for holding liquidity- Accounting ratios in liquidity management -Focal areas of banks in liquidity management – Dimensions of liquidity risk –Dynamics vs. static liquidity management
• **Asset liability management: ALM** system defined –functions of ALCO – structural liquidity –time bucketing –dynamic short term liquidity statement.

**Module C: Financial risk management:** Using treasury instruments beyond the ambit of Proprietary Positions

• **Financial risk:** Techniques to measure it – Hedging – speculation – arbitrage -Roles of the treasury department in managing financial risk.

• **Derivative Instruments:** Forward- futures- options – swaps

• **Foreign Exchange Risk Management in Treasury:** Foreign Exchange (FX) rates- Foreign Exchange (FX) exposure –commercial banks and currency risk dimension -Currency derivatives.

• **Interest Rate Exposure and Risk Management:** Fixed rates & Floating rates –Net interest income (NII) – Net interest margin (NIM) - Earnings at risk (EAR)-Interest rate forward-Interest rate futures –Interest rate options-interest swaps.

• **Equity price risk –commodity price risk:** Forms of equity risk - focus areas of equity risk - RBI guidelines -commodity from risk angle defined

**Module D:** Payment systems practice & issues:

• **Types of payment systems:** Cash Payments Systems-Paper Systems – Electronic systems

• **Processes in Payment process:** Payment Clearing Process - The Settlement Process – SWIFT –Electronic payment security- cross currency payments

• **Payment system risk:** Global Banking Systems and Practices - Identification of Bank accounts - Anti-Money Laundering and Its Impact on Payments - Continuous Linked Settlement (CLS) - Straight-Through-Processing (STP) - ISO 20022 Global Standards

**Module E:** Regulations, Supervision and Compliance of Treasury Operations

• Internal audit system for treasury/market risk management: Internal audit – objective –scope- outsourcing internal audit – Internal audit Vs Internal check

• Capital adequacy Requirements: Capital fund – Tier 1 & Tier 2 capital – Risk weight – control mechanism

• Operational risk: Operational risk events-Ten Principles –Operational risk policy.

• Regulatory capital charge for market risk exposure : Regulatory guidelines on capital charge –framework for measurement of capital charges for interest rate risk related instruments in trade book ,interest rate derivatives ,equities in trade book ,foreign exchange and gold positions

**Readings:**

77
1. Basics of Basel accord in risk management  
2. Master Circular on ‘Prudential Norms on Capital Adequacy’  
3. FEDAI guidelines.

Books  

References:  
1. Indian Institute of Banking and Finance, Treasury Management (CAIIB 2010) – Macmillan publications.  

**MS5620 FINANCIAL SERVICES (4-0-0-2)**

Objectives:  
This course provides an understanding of the various financial services that are available, the regulatory framework governing them, the procedures involved and the current and future scenario in the Indian environment.

Contents:  
- Non-banking financial companies – functions  
- Lease financing, hire purchase finance, consumer credit.  
- Factoring and forfeiting, bills discounting, debt securitisation.  
- Housing finance, insurance services, venture capital financing.  
- Mutual funds, types, fund management.  
- Stock broking, credit rating.

References:  

**MS 5630 INVESTMENT AND COMMERCIAL BANKING (4-0-0-2)**

**Objectives:**
The course intends to introduce the students to the recent developments in the banking sector and equip them to perform the key managerial functions effectively.

**Contents:**
- Liberalization in Banking Sector – Banking Services – Risk Management – Bank Norms
- Investment banking – activities – potential for investment banking in India - Stock broking.
- Electronic banking – ATM – Online banking – Work Technology
- Bank Marketing – Positioning – Competition.
- Bank Supervisions and bank audit – Accounting Standards. Banks foray into insurance – agency contracts

**References:**

**MS5640 MERGERS AND ACQUISITIONS (4-0-0-2)**

**Objectives:**
Mergers and Acquisitions is a powerful tool to build new generation companies to compete successfully on a global basis. This course describes how Mergers and Acquisitions and other forms of corporate restructuring are used in the business world.

Contents:

- Economic, legal and corporate finance considerations of Mergers and Acquisitions.
- Strategic factors arising during the course of restructuring.
- Offensive and defensive practices for hostile takeovers.
- Accounting for Mergers and Acquisitions.

References:


MS5660 STRATEGIC COST MANAGEMENT (4-0-0-2)

Objectives:
The course helps students to understand the real costs and profit drivers of a business so that they can identify and implement cost management strategies in all situations.
Contents:
3. Cost management for manufacturing and service industries – Cost drivers – Multi objective cost system – Industry experiences in “new” cost systems.
4. Integration of cost systems with shop-floor systems – Cost accounting functions in an integrated systems environment.

References:

**MS 5670  FINANCIAL INSTITUTIONS AND MARKETS  (4-0-0-2)**

Objectives:
The aim of the course is to familiarize the students with the different components of financial markets and the role and functions of select financial intermediaries.

Contents:
- Central banking – RBI – instruments of monetary control – secondary debt market – REPOs.
- Foreign Exchange market – exchange control – fixation of exchange rate – exchange control in India – FEMA – foreign exchange transactions of
commercial banks in India – currency convertibility – currency forwards, futures and options – trading in foreign exchange market – relationship between money market and foreign exchange market..


References:

MS 5680 INTERNATIONAL FINANCE (4-0-0-2)

Objectives:

The aim of this course is to provide an understanding of the fundamental concepts and managerial issues pertaining to international finance.

Contents:


References:


MS 5690 COMPUTATIONAL FINANCE (4-0-0-2)

Objective:
The purpose of this course is to provide a basic understanding of the tools in computational finance and their applications to specific situation in finance.

Content:

- Computational finance – Scope – Applications – Overview of tools and techniques.
- Multiple Regression Models – Autocorrelation, ARIMA, Cross Correlation, Multicollinearity, SEM Application
- Heteroscedascity – testing for Heteroscedascity – ARCH & GARCH Models & their extensions – application
- Risk Management & VaR
- Application of neutral network, genetic Algorithm, expert system to finance
- Financial modeling through use of Matlab, SPSS
References:

MS 5700 DERIVATIVES AND RISK MANAGEMENT (4-0-0-2)

Objectives:
This course aims at introducing the fundamentals of derivatives and the application of a few sophisticated techniques and models.

Content:
- Interest rate derivatives – internal rate modeling – futures – stock index, currency, forwarding futures – swaps.
- Portfolio management – value at risk – credit risk – credit derivatives – risk metrics, credit metrics and crash metrics.
- Pricing derivative securities.

References:

**MS662 INFRASTRUCTURE FINANCE (4-0-0-2)**

**Objectives:**
This course introduces the students to the uniqueness of infrastructure financing and explains how to minimize risk and maximize return in such projects.

**Contents:**
- Infrastructure financing in India.
- Financial instruments market access, dealing with risk, incentives and approvals, environment and tax issues.
- Infrastructure project evaluation techniques – bidding process.
- Infrastructure finances ratings and credit services.
- Utilities - Electric, Gas, Water.
- Transport Projects -- BOLT.
- Power and Energy Projects.
- Telecommunication Projects, Housing Projects.

**References:**
4. *Project Finance – Practical case studies*, CMS.
MS 6640 VENTURE CAPITAL AND ENTREPRENEURSHIP FINANCING

Objectives:
This course will cover the elements of entrepreneurial finance, specifically the venture capital industry, its functioning and relevance. The course will cover a diverse set of start-up ventures (technology based, low technology, services) and the early stages of company development. The course would try and address key questions that challenge entrepreneurs and venture capitalists alike: how much money can and should be raised; what is a reasonable valuation of the company; and how should the funding be structured.

The focus of this course will be on analyzing the unique financial issues which face entrepreneurial firms and to develop a set of skills that have wide applications for such situations. This course aims to develop financial and managerial skills that are important for students who might be interested in financing startups in a venture capital setting, becoming an entrepreneur, providing services to entrepreneurs and venture capitalists, purchasing a business, or pursuing a career in an entrepreneurial setting.

Contents:

- Understanding the various sources of capital for entrepreneurial firms
- Overview of Venture capital and private equity funds
- Relevance of Venture capital
  - Factors that make it difficult for the types of firms backed by venture capital investors to meet their financing needs through traditional mechanisms
  - How venture capital addresses these challenges
- Identification of opportunity
  - Models of entrepreneurship
- Evaluating entrepreneurial business opportunities
  - Developing a framework to qualitatively and quantitatively assess markets and opportunities
  - Financial analysis
  - Due diligence issues
- Valuation techniques
  - Real options in entrepreneurial firms
- Financial structuring and contracts
- Monitoring investments
- Venture capital exits
  - IPO
References:


MS6670 ADVANCED CORPORATE FINANCE (4-0-0-2)

Objectives:
This is an advanced corporate finance course and is appropriate for students seeking to deepen their understanding of core finance principles. It will build on the concepts learnt in the basic financial management course. It will provide a strong conceptual foundation in capital budgeting, capital structure and financing decisions. The course will expose the students to the complexities of ‘board-room’ financial decision making.

Contents:

- Overview and Introduction
  Theory of corporate finance; Classical theory of investments and finance; Theory of the Firm; Theory of contracts; Agency theory and transaction costs

- Capital structure and financing
  Revisiting MM propositions; Moral hazard and adverse selection principles; Concept of optimal capital structure; Incentive issues caused by high leverage; Relationship between capital structure and capital costs; Financial engineering in Corporate Finance

- Options and their Valuation, and Corporate Liabilities
  Call and Put options; Option valuation; Black Scholes formula, Applications of option pricing; Hybrid securities such as warrants and convertibles; Real options

- Dividends review
The dividend puzzle; Agency cost explanations of dividends

- Financial Strategies for Value Creation
  New valuation techniques - including equity cash flows, Cross-border valuation; Interaction between a firm’s financial and business strategies

- Financial Planning
  Approaches to financial planning; Short term financial planning; Credit and cash management; Leasing; Types of leases; Financial lease; Valuing financial leases

Text books:


References:


Journals: Journal of Applied Corporate Finance, Financial Management, Euromoney, Risk

MS 6680 FIXED INCOME SECURITIES: STRUCTURE AND TRADING (4-0-0-2)

Objectives:
The aim of this course is to impart knowledge and skills required in fixed income/debt market operations.

Contents:

- **Fixed Income Securities Market**
  Market Segments, Participants, Instrument Features, Trading Mechanism in NSE and Emerging Debt Markets, Bond market indices and benchmarks.

- **Regulatory and Procedural Aspects**

- **Government Securities market**

- **Repo Market**
  Structure and Pricing, Trading Patterns, Settlement of Repo Transactions, Repo Market in India.

- **Valuation of Bonds**
  Yield Curve and Term structure of Interest Rates, Bootstrapping, Alternative Methods to Estimate Yield Curve, Theories of Term Structure of Interest Rates

- **Price, Yield and Interest Rate Risk**
  Duration, Modified Duration, Portfolio Duration, Hedging Strategy and Duration, Analysis of Bonds with Embedded Options

- **Securitisation and Mortgage Backed Security (MBS)**
  Fixed Rate and Adjustable Rate Mortgages, Measures of Prepayment, Creation of MBS, Valuation, Mortgage Derivatives

- **Fixed Income Portfolio Management**
  Matched Funding, Horizon Matching, Indexation, Portfolio Insurance

- **Fixed Income derivatives**
  Mechanism of FRA, IRF and IRS

References:


**MS6690 WORKING CAPITAL MANAGEMENT (4-0-0-2)**

**Objectives:**
The purpose of this course is to provide an understanding of the concepts and mechanics of working capital management. The course will use case studies in all units.

**Contents:**
- Working capital management – determinants and estimation of working capital requirements.
- Accounts receivables management; factoring.
- Inventory management
- Cash management
- Working capital finance: trade credit, bank finance, commercial papers Current asset – current liability management.

**References:**

**MS 6700 MARKET MICROSTRUCTURE**  
*(4-0-0-2)*

**Objectives:**
The course provides understanding about the price formation process across various market structures. The interlinkages between information, prices and volume facilitate to develop trading strategies.

**Contents:**

- **Markets and Market Making**
  - Nature of Markets
  - Market structures
  - Prices and Markets
  - Trading Industry
- **Inventory Models**
  - Order driven Markets
  - Order arrival and market making
  - Prices and Inventories in Competitive markets
  - Inventory models and Market Maker behavior
- **Information based models**
  - Informed and Uninformed Traders
  - Trade quantities and price behavior
  - Glosten-Milgrom Model
  - Sequential Trade Models and Price Behavior
- **Strategic Trader Models**
  - Price behavior and multiple informed traders: Trading Mechanism
  - Strategic behavior and uninformed traders
- **Information and Price process**
  - Information and sequence of prices
  - The Volume Critique
  - The Role of time in Price Adjustment
- **Market Liquidity and Viability**
  - Nature of Liquidity
  - Liquidity and Market performance
  - Liquidity and Transaction Cost Measurement
  - Bid-Ask Spread
- Impact Cost
- Market Volatility and Stability
  - Performance Evaluation and Prediction
- Issues in Market Structures
  - Competition
  - Insider Trading
  - Bubbles, Crashes, Circuit Breakers
  - Market Transparency and Trader Anonymity
  - Policy Issues in Market Structures

References:

2. Larry Harris (2007), Trading and Exchanges: Market Microstructure for Practitioners, Oxford University Press
3. Llija I. Zovko (1999), Topics in Micro Structure, Amsterdam University Press

Journals

1. Financial markets, Institutions and Instruments
2. Journal of quantitative Finance

MS 6710  FINANCIAL RISK MANAGEMENT  (4-0-0-2)

Objectives:
Risk Management has evolved over the past decade as an indispensable function of business organizations. This course covers the basic concepts of modeling, measuring and managing financial risks. This course will examine a number of notorious cases and help you to design risk management reports and systems.

Contents:

- Risk in Perspective
  - Risk and Randomness and Examples of financial disasters
  - Measurement and Management
  - Aggregate Risk: Capital allocation

- Sources of Risk:
  - Currency Risk: Volatility, Correlations, Cross Rate Volatility and Devaluation Risk
  - Fixed Income Risk: Interest rates and Credit spread Risk
- Equity Risk
- Commodity Risks

**Modeling Risk Factors:**
- Risk simplification: Diagonal model and Factor models
- Optimal Hedging
- Implied Distributions

**Credit Risk Modeling**
- Measuring Default Risk from market prices
- Credit Exposure
- Credit Metrics and Credit analytics
- Off balance sheet financing and lessons on credit risk management

**Market Risk Management:** VAR methods, Risk budgeting, Volatility risk and implied volatility, Liquidity Risk and Leverage, Hedge funds and their measures

**Operational Risk management:** Identifying, Assessing and managing operational risk

**Enterprise Risk Management**
- Framework
- Concepts and Elements
- Processes
- Risk management policy

**Regulatory framework: Basel Accord**

**References:**

MARKETING ELECTIVES

MS 5710  CONSUMER BEHAVIOUR  (4-0-0-2)

Objectives:

The course stresses on understanding the concepts of consumer behaviour, how they are used in business practice and how they relate to one another.

Contents:

- Consumer behaviour – introduction – outcomes
- Motivation, ability and opportunity; exposure, attention and perception
- Categorizing and comprehending information
- Attitude formation and change – memory and retrieval
- Process of decision making – post-decision processes
- The consumer’s culture – reference groups – psychographics
- Consumer behaviour outcomes – consumer welfare

References:


MS 5720  ADVERTISING AND PUBLICITY  (4-0-0-2)

Objectives:

The Objective of the course is to provide an approach to the management of advertising that is sophisticated, practical and relevant to planning, decision-making and control.

Contents:

- Advertising management – advertiser – facilitating institutions – perspectives on advertising
- Advertising planning and decision-making – situation analysis – marketing program – segmentation strategies – social and legal factors – budget decision
- Advertising objectives – image and competitive position – attitude and market structure – behavioural objectives
- Communications – persuasion and market processes – copy decisions – copy testing
• Media decisions – media research
• Economic, social and legal constraints

References:


MS 5730 INTERNATIONAL MARKETING (4-0-0-2)

Objectives:
The purpose of the course is to educate future managers to meet international challenges. The course provides foundations that are useful for explanation, prediction and control of international business activities.

Contents:
• Process of international marketing, domestic vs. international marketing - characteristics of MNCs – benefits of international marketing
• World market environment – political – legal – culture
• Marketing research and information system – market analysis and foreign market entry strategies – consumer behaviour in the international context
• International marketing decisions; product strategies – product planning – branding and packaging – distribution strategies – channels – physical distribution and documentation; promotion strategies – personal selling – publicity, sales promotion – advertising – internet marketing; pricing strategies
• Trade distortions and marketing barriers, legal protection

References:
MS574 PLANNING AND MANAGING RETAIL BUSINESS  (4-0-0-2)

Objectives:
The objectives of this Course are to provide students with a basic & better understanding of Marketing Concepts as applied to Retailing, the different formats in retailing, the conceptual issues as applied to retailing and Current and future developments in India and elsewhere.

Contents:

- Overview of Retailing
- Theories of Retailing
- Location & Site selection Decisions
- Store Design, Layout and Visual Merchandising
- Pricing & Promotion Decisions
- Decisions on Stock keeping units
- Understanding segmentation & Positioning
- National/Regional Brands Vs Store Brands
- Internet & Electronic Retailing
- Role of Technology in Retailing
- Future trends & Innovation in Retailing
- Strategic Concerns

References:

2. Berry Berman & Joel R. Evass, “Retail Management – A Strategic Approach”.
   www.stir.ac.uk/departments/management/marketing/irs/sites.htm
   (A comprehensive junction providing links to academic & Commercial sites)

MS575 BRAND MANAGEMENT  (4-0-0-2)

Objectives:

- To examine and understand the processes of building, Designing, measuring and maintaining brand equity
- To discuss actual applications of Brand Management Strategies and methodologies presented in class, together with cases and exercises.
Contents:

- Module 1 – All brand related definitions and basic concepts, diverse interpretations, and the emerging concepts like “brands as a Central force in business”.

- Module 2 – Brand Promise, Brand Vision, Brand Architecture and different approaches to Brand Building, with a major focus on Brand Awareness strategies.

- Module 3 – Converting a commodity into a Brand; the Indian experience

- Module 4 - Brand Audit, Brand Valuation methods and approaches.

- Module 5 – Brand Building and the web.

References:


Track the website www.interbrand.com

MS576 MARKETING ON THE INTERNET (4-0-0-2)

Objectives:
To give students a framework for understanding and implementing marketing on the Internet
To understand not only how successful net marketing operates, but how existing Organisations should combine the Internet with their traditional market approaches.

Contents:

- Economic opportunities created by the net

- Net marketing themes such as information based marketing, online quality enhancement, personalization, Community building, real time marketing and on-line customer management.
- Building traffic to a site, methods of acquiring & retaining visitors
- Ways to combine the Net with the existing operations. Key issues like Channel conflict, supply chain Management and Pricing.

References:


MS 5770 STRATEGIC MARKETING (4-0-0-2)

Objectives:
The primary concern of any organization is to understand and appreciate the following question – “What Products? and What Markets?”. This course will try to answer these concerns through conceptual, analytic and practical inputs.

Contents:

- **Module 1** – Difference between Strategic Marketing & Marketing Strategy, Limits to Market share, Driving Forces, Price Wars, Strategies to attack and defend, Share increase strategies, Organisational culture, Strategic Windows Adding Value to the customer, ways to predict the behaviour of competition.
- **Module 2** – Analysing Market opportunity and assessing company Capability, Cost Dynamics: Scale and Experience Effects.
References:


Website: www.mckinseyquartely.com

MS 5780 E-BUSINESS STRATEGIES (4-0-0-2)

Objectives:
This course focuses on new business models emerging in e-commerce, in functional areas such as e-marketing, e-support/service and e-procurement. The course objectives are:

- To give students a framework for understanding and implementing business strategy on the web, including marketing strategy, customer service strategy and procurement operations.
- To understand not only how successful net marketing operates, but how existing operations should combine the Internet with traditional operations and marketing channels.

Contents:

- Defining e-business strategy and e-business evolution
- E-business models: direct to customer, full-service provider, whole of enterprise, portals, agents, auctions, aggregators, shared infrastructure, virtual community, value net integrator, content provider, etc.
- Integrated strategy approaches in e-business models: How firms develop and integrate new technology, new business innovations, and policy in their e-business models to sustain competitive advantage

Focused Topics:
- Economic opportunities created by the net
E-marketing strategies, including personalization and community building
Ways to combine the net with existing operations – issues like channel conflict, supply chain management and pricing
Building traffic to a site. Acquiring and retaining visitors.
E-support and service strategies
Branding Strategy and Domain Names
E-business design
Innovation and Business Method Patents in the Models
Information Value and the economics of information
Customer Relationship Management over the internet
Mobile E-Commerce
Ethics in the digital age
E-Government

References:


MS 6580 – SALES AND DISTRIBUTION MANAGEMENT (4-0-0-2)

Objectives:

This course covers the theories, concepts, techniques, and practices related to Sales and Distribution Management.

Contents:

- Importance of developing an analytical approach towards Sales Management.
- Practical aspects of Sales Management; forecasting, field supervision, territory management, and quota setting.
- Human relations aspects in Sales Management and the importance of the Sales Manager’s role in getting the best out of his people.
- Channel selection, design, and implementation.
Differences between intensive, selective, and exclusive channels, different formats of channels, when to choose what, and why.

Elements and principles of managing channel conflict.

Text books:


**MS 6590 CUSTOMER RELATIONSHIP MARKETING (4-0-0-2)**

**Objectives:**

To introduce students to the underlying philosophy, concepts and tools of Customer Relationship Marketing and to help them understand the economics of customer loyalty. The intention is to facilitate the development of practical insight among students that will help them in identifying profitable vs. unprofitable customers, and enable them to analyze and design relational programs and strategies.

**Contents:**


- *Terms, definitions and models* – Customer satisfaction, trust and commitment, loyalty types and models of customer loyalty, relational bonds, loyalty ladder.

- *Customer database management* – Developing customer databases, customer profitability analysis, selection and targeting, CLV.

- *Customer based value metrics* - Primary and popular metrics - share of category requirement, size of wallet, share of wallet, Strategic metric – RFM.

- *Relationship marketing process* - Designing, implementing and optimizing loyalty programs; industry cases.

- Functional vs. emotional needs, handling complaints, customer service, brand communities, online marketing and CRM.

**Text books:**


References:

MS 6720 INDUSTRIAL AND SERVICES MARKETING (4-0-0-2)

Objectives:
This course explores the role of marketing for industrial and services organisations. The marketing variable's distinctive impact on industrial and service organizations are also discussed with practical implications.

Contents:
1. Industrial marketing - Strategic variables - market selection and product planning, pricing strategy, distribution strategy - Buyer seller relations, organisational buyer behaviour models.
2. Role and importance of services marketing, strategic variables - price, promotion strategies

References:
INFORMATION SYSTEMS ELECTIVES

MS 5810  DECISION SUPPORT SYSTEMS (4-0-0-2)

Objectives:
Provide a broad overview of analytic Decision Support Systems (DSS) in the industry. This course introduces various decision support methodologies, including deterministic and stochastic models. Deterministic models include mathematical programming formulations, with a special focus on supporting logistic and location decisions. Stochastic models include the analysis of queuing systems, marketing models and financial spreadsheet models, with applications in services management, marketing research and options pricing. Extensive examples will be provided of real-life decision support systems from Airline operations, the Public Sector and Marketing decision support. Emphasis will be placed on developing analytic thinking and model-building skills.

Contents:
- Introduction to the formulation and classification of Mathematical Programming problems.
- Sensitivity analysis and duality.
- Formulation of network models.
- Formulation of integer programming models.
- Location models.
- Vehicle routing models.
- Random variables and probability distributions.
- Introduction to queuing models.
- Marketing decision support – logit and probit models for consumer choice behavior.
- Marketing decision support – use of brand scanner data.
- Marketing decision support – sales force optimization.
- Financial spreadsheet models – options pricing.
- Financial spreadsheet models – bond portfolio immunization.
- Architecture of DSS.
- Overview of DSS software and applications.
- Databases for DSS.
- Executive Information Systems (EIS).
- Information and Decision Support Systems – a comparison.

References:


MS 5820 SOFTWARE ENGINEERING AND PROJECT MANAGEMENT (4-0-0-2)

Objectives:
The increasing use of information technology in organizational operations, the dramatic developments in hardware and software, the complexity of organizational processes and their automation, and the demands of competition in the marketplace, all of these have contributed to the need for ‘engineering’ software and ‘managing’ software projects. This requires discipline among the stakeholders participating in the entire software life cycle beginning with identifying user requirements and apparently (but, never) ending with implementation and maintenance.

This course introduces students to the elementary concepts and techniques of Software Engineering and Project Management, with a focus on applications to business organizations and their software development efforts.

Contents:
- The Software Development Life Cycle (SDLC), and Process Models.
- User Requirements and Software Requirements specification.
- The Physical System – Analysis and Modelling approaches.
- Quality and testing issues.
- Process and Project Metrics.
- Software Project Management concepts.
- Software Project Planning and Risk Analysis.
- Software Project Implementation – Scheduling, Monitoring and Control.

References:

MS 5830 BUSINESS ANALYSIS FOR IT SOLUTIONS (4-0-0-2)

Objective:
The Course seeks to address the Business/IT interface in architecting business solutions. It will lay theoretical foundations and provide a conceptual framework for solving business problems by leveraging IT tools and techniques.

Contents:

- Evolution of the IT industry; IT Leaders’ Big Decisions; Social Trends and IT; Economic Trends and IT; Business Trends and IT; Indian IT industry.
- Analysts’ View Points; Key Parameters in the IT Industry; Enterprise Architecture (EA) and Strategy; EA – a holistic View; Software Stack.
- Strategy; Adaptive Fit View of the Strategy; Solution Development Cycle; Role of a Business Analyst.
- Strategic Level Metrics; Tactical Level Metrics; Gaps in Metrics; Needs and Requirements; Effective Requirements Definition; Key Knowledge Areas.
- Enterprise Analysis; Requirements Planning and Management; Requirements Elicitation; Requirements Analysis and Documentation; Requirements Communication; Solution Assessment and Validation.
- Business Rules; Business Case Design.
- Case Study; Aerofirma Inc.; EA, Requirements and Zachman Framework.
- Business Process Management (BPM) and Business Process Re-engineering (BPR); Business Technology Convergence; BPM Enabling Tools.
- Preview of convergence of BPM, UML and Database Design; Selection of BPM Tools; Business Process Analysis; Scenarios of Focus.
- Gartner Business Value Model; Key Principles of Real Time Enterprise; Routes to Strategic Business Improvements; Provision for spillovers.
References:


Additional reading materials will be given prior to the beginning of the course.

MS 5840  IT CONSULTING (4-0-0-2)

Pre – requisites:

a. Basic knowledge of Computer Hardware, Networks and Software Concepts.

b. Basic knowledge of the Software Development Life – Cycle (SDLC).

Objectives:
This course introduces framework for IT consulting across the entire spectrum of services from Blueprint to Building Blocks, Enterprise Architecture Definition, Application Design, Program Management for Implementation & Roll-out, Product & Partner Evaluations, Outsourcing Options, Benchmarking Processes & Quality, Metrics & Measurement and IT Governance Models.

Contents:

- Introduction to IT Consulting
  Scope and Definitions
  Current state and Future trends
  Consulting frameworks
  How to Choose a Consultant

- IT Consulting Methodology
  Engagement Model
  Engagement Methodology
  Engagement Team
  Engagement Pricing

- Enterprise Business Plans
  Understand Business drivers
  Identification of Technology drivers
  Mapping of Business & Technology drivers

- IT Blueprint / Road map
  Study of AS IS State
  Recommendations on TO BE State
  GAP Analysis & Strategies for bridging
Evaluation of Technology Stack
Features of Technology Stack
Future proofing of Technology Stack

- Governance Models
  Identification of Stakeholders
  Understanding Interfaces
  Defining Governance Models

- Product / Partner Selection
  Evaluation Methodology
  Evaluation Criteria
  Outsourcing Options
  In-sourcing, Co-sourcing, Outsourcing

- Benchmarking Process / Quality
  Benchmarking current levels
  Industry Accreditations – CMM approaches
  Metrics & Measurements
  Identifying Metrics
  Defining Measurement Frameworks
  Assimilation of Baseline data

References:


MS5850 OBJECT-ORIENTED ANALYSIS AND DESIGN (4-0-0-2)

Objectives:
The Object-Oriented paradigm is a systematic and structured way, of perceiving, understanding, modeling, analyzing and designing systems. Although its applications have mostly related to computing and information systems, the basic concepts and techniques have a much wider scope for applications in other areas including organizational systems and processes. This methodology's conceptual relationship with the more general knowledge area of Systems Thinking enables its application for achieving improved organizational efficiency. The methodology is also a powerful means for general problem-solving.
This course provides students with an introduction to the basic concepts and techniques of Object-Oriented Analysis and Design, with a focus on applications to business organizations.

Contents:

* Introduction to the Object-Oriented paradigm
  - The need,
  - Examples,
  - Basic notations and conventions,

* Object-Oriented Modeling Concepts
  - Objects,
  - Classes,
  - Relationships,
  - Encapsulation,
  - Message sending,
  - Generalization/Specialization Hierarchies and Inheritance
  - Polymorphism, Reuse

* Models and the Unified Modeling Language
  - Types of models
  - Use-case diagrams
  - Class diagrams
  - Object diagrams
  - Sequence diagrams
  - Collaboration diagrams
  - State-chart diagrams
  - Activity diagrams
  - Component diagrams
  - Deployment diagrams

* Introduction to Design Patterns

References:

2. Weisfeld, Maft; The Object-Oriented Thought Process; Techmedia, New Delhi, 2000.


**MS5860 INTRODUCTION TO DATABASE SYSTEMS (4-0-0-2)**

**Objectives:**
Databases are ubiquitous in contemporary computing systems. From a purely strategic point of view, databases have served the interests of business intelligence, both internal and external, to organizations. From the operations point of view, databases are considered to be vital resources in several organizations. The difference between successful, competitive organizations and those that struggle for survival can be traced back to their respective databases in many cases, and especially their design, organization, contents and security systems.

This course provides students with an introduction to the basic concepts and techniques related to the conception, design, implementation and use of Database Systems, with a focus on applications to business functions.

**Contents:**

**Data and Databases**
- The need,
- Examples, File Systems, DBS - Types and Architectures,
- Uses of DBS

**Data Modelling**
- Types of Data Models, Entity-Relationship Modeling, Relational Data Models

**Database System Design**
- Database Organization, Normalization, Performance Tuning, Database System Implementation, Schemas, Domains, Tables and Views, Editing, Access issues, Use of SQL

**Overview of Advanced Concepts**
- Transaction Management, Distributed Databases, Data Warehousing, OLAP, and Data Mining, Multimedia Databases, Management Considerations
- Case Studies

**References:**


**MS 5870 INTRODUCTION TO KNOWLEDGE MANAGEMENT**

(4-0-0-2)

**Objectives:**

This course is designed to introduce the fundamentals of knowledge management to MBA students, and enable them to appreciate its critical role in enhancing organizational performance and competitiveness.

**Contents:**

- The rise of Knowledge Management
- Traditional Methods
- Factors of Productivity
- The Learning Organization
- The Role of Information Technology
- Implications to Leadership and Competitiveness
- Concepts of Knowledge
- Definitions
- Attributes
- A Classification Framework
  * Forms
  * Types
  * Organizational Levels
  * Structure
  * States
  * Domains
- Knowledge and Organizational Strategy
- Elements of Organizational Strategy
- Knowledge for Strategy Formulation and Implementation
- Knowledge and Organizational Leadership

- Knowledge and Organizational Processes
- Elements of Organizational Processes
- Knowledge for Process Effectiveness and Efficiency
- Knowledge Environment and Infrastructure
  * Structure
  * Climate and Culture
  * Technology and Systems

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• Knowledge Management Processes and Practices
• Knowledge Creation and Acquisition
• Knowledge Documentation and Retrieval
• Knowledge Sharing and Application

References:


MS5880 INTRODUCTION TO COMPUTER NETWORKING (4-0-0-2)

Objectives:
This is a general introductory course on Networking, Network Structures, Forms, Types and Technologies, Communication Protocols, Network Security, and related topics within the context of business applications and management issues. This should enable students to develop a basic understanding of this subject and also appreciate its relationships with other subjects within the professional specialization of Information Systems and Technology offered in a masters level business programme.

Contents:

• Introduction to Networking Concepts, Protocol, OSI Layer (Repeater, Bridge, Router, Gateway, etc. Datalink Layer
• HDLC, PPP
• Ethernet - Introduction to ATM (Asynchronous Transfer Mode), Introduction to Internet, Principle, architecture, addressing (IP Address), Network Layer
• IP protocol, routing, Subnet, Supernet - Transport Layer, TCP, Sliding window, UDP, ports/sockets
• Network Management System (SNMP)
• Security - System level security, Network level security (Firewall, proxy, etc), NAT, Transaction Security (Private key encryption, Public key encryption)
• Advanced Topics VLAN, VPN, VoIP, IPv6, ADSL
• Networking Practice & Experience (analysis, design, implementation and maintenance of a network)

References:


MS5890 IT SYSTEMS MANAGEMENT (4-0-0-2)

Objectives:
Today’s Managers face the challenge of deploying and managing Information Technology (IT) solutions in their organizations. While the conceptualization selection building of an information technology solution is an important aspect of a manager’s life, there is an urgent need to understand the fundamentals of IT Systems Management form a business perspective.

This course introduces a framework for IT Systems Management across the entire life cycle. This includes building of a business case, defining and managing the change process, selecting and deploying a specific hardware, network storage and software solution, operating the solution, managing
security, performance and business continuity, supporting the resolution of problems and exceptions, and measuring the impact on the business.

Contents:

- Introduction of IT Systems Management
  - Scope and definitions
  - Current and future Technology – hardware, software, storage, networks
  - Systems Management frameworks
- Change Management Processes
  - Identifying the need for change
  - Making a business case and measuring return on investment
  - Managing change – people, tools processes
- Configuration Management Process
  - Current and Target Architecture Definitions
  - Vendor Selection
  - Solution Deployment
- Operations Management Process
  - Application Management
  - Performance Management
  - Capacity Planning
  - Business Continuity and Disaster Recovery

References:

Additional Reading:
Objective:
Software development outsourcing is the practice of developing software by another company. Offshore outsourcing involves software development in another country, and it has become a major source of revenue for many software companies in India.

This course will discuss business practices in software development outsourcing and their limitations. It will emphasize the issues and risks in such outsourcing, and methods to manage these risks.

Contents:

- Software development outsourcing objectives
- Various types of outsourcing relationships with vendors
- Short term and long term implications of outsourcing
- Risks in outsourcing and methods to manage risks
- Selective outsourcing
- Offshore software development outsourcing
- Risks in offshore outsourcing and methods to manage risks
- Selective offshore outsourcing

References:

Books

c) Audit of computer-based transactions requires a radically different approach that used traditionally for manual transactions based systems.

Consequently, computer-assisted audit tools have been developed to verify the adequacy of organizations’ internal controls and to auditing these controls.

This course is devoted to an in-depth study of control and audit of information systems in business organizations. IT controls and their evaluation, computer-based auditing techniques, and security aspects will be dealt with in the course. Recent developments in IT such as client-server systems and Internet and their impact on auditing, control, and security will also be explored in the course.

Contents:

- Conducting as IS Audit
  - What is an audit?
  - Traditional auditing techniques
  - Effect of computers on the auditing process

- Principles of IT Controls

- Management Controls
  - General and Systems Development Controls
  - Programming and Data management Controls
  - Security Management Controls
  - Operations Management Controls
  - Quality Assurance Management Controls

- Specific IT Controls
  - Boundary and Input Controls
  - Processing and Database Controls
  - Output and Communication Controls

- IS Auditing
  - Evidence Collection: Computer Assisted Auditing Techniques
  - Auditing Code
  - Auditing Use Acceptance Tests
  - Concurrent Auditing Techniques
  - Control Flow Charts and other Tools

- Evidence Evaluation Techniques
  - IT Security
    - Security Design Methods: Implications for IS Development Technology-specific issues in IT Auditing

References:

**MS 6840   DATA WAREHOUSING AND DATA MINING   (4-0-0-2)**

Objectives:
This course provides a broad overview of data warehousing and data mining, with specific focus on applications to Customer Relationship Management (CRM). At the end of this course, students should be familiar with the Customer Management Lifecycle and the use of data mining techniques in customer acquisition and management. The course reviews data mining techniques such as Market Basket Analysis, Decision Trees and Automatic Cluster Detection, besides traditional statistical classification models such as Logistic Regression and Discriminant Analysis. Emphasis will be placed on applying these methodologies to realistic business situations.

Contents:
- Introduction to Data Warehousing, Data Mining and the Customer Management Lifecycle. Examples from the credit card industry, insurance, airlines and banking.
- Overview of basic statistics concepts and methods.
- Introduction to Data Warehousing – The business dimensional lifecycle.
- Data Warehousing – Project planning for managing a data warehouse Project.
- Data Warehousing – Requirements gathering.
- Data Warehousing examples from the Healthcare industry.
- Online Analytic Processing (OLAP).
- Automatic Cluster Detection.
- Link Analysis.
- Neural Networks & Genetic Algorithms.
- Data Mining in customer acquisitions, e.g. credit card acquisition campaigns. Use of Logistic Regression models.
- Data Mining in customer acquisitions – Discriminant Analysis models.
- Data Mining in customer acquisitions – Measuring Customer Lifetime Value.
- Customer Management – managing a credit card customer base.
- Introduction to decision tree modeling.
- Setting customer management policy – effect of management policies on customer spending and credit losses.
• Management of customer attrition and collections efforts.
• Overview of CRM products and companies.
• Market Basket Analysis.
• Web mining applications in e-marketing.
• Web mining applications in e-marketing-click-through rates and conversion rates for Banner ads. Placement of banner advertisements.
• Designing E-loyalty programs.
• Text mining and knowledge management systems.
• Spatial data mining.
• Data Visualization.

References:


**MS 6850  SOFTWARE ESTIMATION METHODS AND MODELS**

(4-0-0-2)

**Objectives:** The aim of this course is to provide an exposure to various models and procedures in the software development.

**Contents:**

• Software Development Life Cycle (SDLC) models
• Measurement of software development
  - Terminologies, Different Phases in estimation
• Software estimation dimensions
  - Size, Effort, Cost, Schedule
• Estimation methods and their features
  - Lines of Coe, LOC models (COCOMO, Putnam, SLIM), Function/Feature
• Points Analysis, Wideband Delphi
• Calibration of models for organizational implementation
• Software estimation tools
  - Work Breakdown Structures, Statistical Regression, Neural Networks
  - Packages (e.g., Check Point)
• Causes for inaccurate software estimation and remedies
• Estimation methods for other SDLC models.

References:


MS 6860 ENTERPRISE RESOURCE PLANNING (4-0-0-2)

Objectives:
Students will be exposed to the scope of Enterprise Resource Planning (ERP) systems, the motivating factors for implementing ERP systems in corporations and the enabling role of ERP systems in improving the performance of corporate functions. Students will comprehend the challenges associated with implementing large-scale ERP systems and the impact of these systems on key business processes (especially, Human Resource Management). Students will gain an understanding of business process integration achieved through successful adoption of an ERP system by a firm. Students will explore the features of PeopleSoft software (installed in the HR Lab) through hands-on experience and ERP-based projects related to HRM practices will also be undertaken.

Contents:

• **Choosing the right ERP System:** Building a Business case - Business Models available – In-house ERP vs. ASP vs. Outsourced model – Selection of a business model – Product vendor evaluation – Evaluation of Implementation Partner.
• **ERP Services:** Types of services – Implementation, Global Rollouts and Consolidations, ASM, Upgrade Services, Hybrid services like ERP Testing
• **Design and Implementation Challenges:** Designing and implementing ERP systems - Approaches - Implementation methodologies – Business Process Re-Engineering - Preparing Organization for Change.
• **Impact of ERP on Human Resource Management:** Challenges pertaining to Human Capital Management and the role of ERP in enhancing HR value proposition.
• **Process Integration using ERP:** Financials – SCM – CRM – Business Analytics.
• **Future of ERP:** Current Business scenario, Impact of Web 2.0 on ERP.

**Text books:**


**References:**


**MS 6870 IT SERVICES AND OUTSOURCING (4-0-0-2)**

**Objectives:**

The course outlines sourcing models in IT services and theories that support outsourcing of IT and Services. It enables students to understand the rationale behind IT outsourcing decisions and the dynamics of decision processes while analyzing global services delivery in IT services from both client and service provider perspectives.

**Contents:**

- Drivers for global sourcing of services, sourcing models in IT, offshore and onshore, economics of outsourcing, economics of offshore outsourcing, transaction cost economics, costs – benefits and business case for outsourcing, comparative advantage in outsourcing, politics of outsourcing.

- Strategic decision process in outsourcing, core competence, resource based view, multi-vendor and selective sourcing, offshore strategy and governance, country selection, vendor-location decision.
Contracts in IT outsourcing, transition management, performance management and SLAs, relationship management, client risks in offshore IT outsourcing, vendor perspective in IT outsourcing, IT services portfolio, offshore software development, Remote Infrastructure Management, Quality Standards, beyond offshoring.

Text books:
2. Carmel E. & Tjia P. (2005), Offshoring Information Technology, Sourcing and Outsourcing to a Global Workforce, Cambridge University Press; Cambridge, UK

References:

Case Study: Strategic Outsourcing at Bharti Airtel Limited, HBS 9-107-003
INTEGRATIVE MANAGEMENT ELECTIVES

MS 5370   TOTAL QUALITY MANAGEMENT   (4-0-0-2)

Objectives:

By the end of the course, students will be able to: Recognize and generalize the basic philosophies of quality management; apply the basic techniques and tools of quality management; determine the effectiveness of the quality management principles.

Contents:

- The Process of Continuous Improvement
  - **Basic Tools:** Analysis of data using simple statistical techniques, graphical tools and diagrams.
  - **Statistical Process Control:** Control charts for attributes and variables, and the use of probability distributions.
  - **Advanced Tools:** Enhancing the seven-step method, Process Capability and Six-Sigma Quality, Taguchi’s Loss Function and the Design of Experiments, and Case Study.

- Quality Function Deployment (QFD) QFD and the House of Quality, Research Methodology and issues, and Case Study.
- Benchmarking - Competitive, Process and Strategic Benchmarking.

References:

MS5910 BUSINESS STRATEGY: ANALYSIS AND FORMULATION
(4-0-0-2)

Objectives:

To provide an understanding of how specific strategies can be formulated.

Contents:

- Strategies – Different Alternatives – Choice of Strategies – Scenario Analysis & Strategic Audit
- Mergers & Corporate restructuring – Framework for Analysis, Comparative Patterns, Types of restructuring
- Portfolio restructuring, Conglomerate Restructuring, Financial restructuring, Organisational restructuring
- Strategic Alliances, Value Based Management Strategies, e-business strategies

References:


MS5920 CREATIVITY AND INNOVATION
(4-0-0-2)

Objectives:

'Creativity' and 'Innovation' are vital for human progress. There are two dimensions of human progress:

a) Reactive progress - through solving existing problems, and
b) Proactive progress - through breaking new ground or going beyond existing frontiers (probably leading to newer problems).

The extent of our progress on both dimensions is dependent on our ability to be creative and innovative.

In different contexts, 'Creativity' commonly connotes our manifested capability to bring forth new ideas. 'Creativity' is the cause and essence of all what we observe as out of the ordinary, yet attractive, useful, relevant, insightful, and spiritually elevating.

In a contemporary sense, 'Innovation' refers to the whole process of developing and spreading the use of a product (a physical entity) or an idea (a conceptual entity) across space and time through a variety of activities - scientific, technological, business and organizational. 'Innovation' hinges on 'Creativity'.

The subjects of 'Creativity' and 'Innovation' have received and intense attention from scholars and practitioners from various Knowledge of 'Creativity' and 'Innovation', and their application should be invaluable to all students.

Contents:
- Introduction to 'Creativity' and 'Innovation' - The need
  - Examples,
  - Basic mental processes.
- Concepts and Methods
  - Types of thinking,
  - Idea-generation frameworks and methods,
  - Idea-evaluation frameworks and methods,
  - Idea-implementation frameworks and methods.

References:
4. De Bono, Edward; Parallel Thinking - From Socratic to de Bono thinking; Penguin; London. i 995.
Objectives:
△ The aim of this course is to provide an exposure to impart the skills in Technology Management, ability to appreciate, evaluate/assess, and control the use of technology in business and assess the impact of technology from the economic, societal, environmental and legal points of view.

Contents:

Technology – An Introduction
- Definitions: Classifications;
- Brief history of development in agriculture, food, construction, energy, manufacturing, transport, communications, health-care, and information technologies;
- Global/macro-issues;
- Organisational / micro-issues.

Technological Change
- Technology characteristics:
- Functional capabilities and change indicators;
- Theories, Models and Measurement of technological change;
- Technology life-cycles;
- Time scales of technology development;
- Innovation, substitution and diffusion models.

Technology Forecasting (TF)
- Importance;
- Overview and classification of forecasting methodologies;
- Exploratory and Normative TF;
- Technology generations and inter-generational interactions.

Technology assessment (TA) and impact Analysis
- Assessment objectives and types;
- Components and conduct of technology assessment;
- Macro and micro-level economic, social and environmental impacts;
- Techniques of impact analysis;
- Impact evaluation.

Trade in Technology
- Technology evaluation and pricing;
- Technology transfer – by diffusion and through contracts;
- Technology Marketing;
- Institutional arrangements and legal issues;
- Patents, Transfer Rights, and Controls.


Strategic Management of Technology

- Technology strategy – macro and micro levels;
- Technology Planning, choice and adaptation;
- Technology considerations in business strategy – Manufacturing and Information Technologies;
- Use of TF;
- Technology alliances.

References:

1. Forbers, Naushad and David Wield; From Followers to Leaders – Managing technology and innovation; Routledge, London, 2002.
3. Ford, David and Michel Sare; Managing and Marketing Technology; Thomson Learning, Singapore, 2001.

MS6070 QUALITY ASSURANCE MANAGEMENT (4-0-0-2)

Objectives:
This course will introduce the students to the fundamental concepts of and the statistical tools and techniques for Quality Assurance Management. It will enable them to plan, organize, implement and control Quality Assurance Systems; participate in process/business related design, kaizen/six-sigma projects.

Contents:

- Statistical Applications
  - Introduction to 7 QC Tools
  - Pareto diagrams
  - X and R control charts
• Design of Experiments (DOE)
  o Statistical design of experiments
  o Types of experiments
  o Full/Fractional factorial experiments, Latin squares, Randomized block plans
  o Interactions among factors
  o One-way/Two way ANOVA Three factor, three level experiments
  o Case studies
  o Taguchi methods (Loss functions, Signal/Noise factors)

• Overview of Reliability and Risk Management
  o Reliability and Systems reliability
  o Failure modes and mechanisms
  o Failure rate, MTBF, Maintainability, Availability
  o FMEA, Fault-tree analysis
  o Product safety and liability

References:

MS 6170 PROJECT MANAGEMENT (4 -0-0-2)

Objectives:
This course intends to develop human resources with basic competence in and sound understanding of the theory and practice of project management. More specifically: introduce students to the purpose, principles, problems and challenges, concepts, techniques, and practice of Project Management and its various facets; impart skills in project planning, execution and control methods; introduce students to Project Management software and applications.

Contents:
• The nature of projects
• Types of projects
• Project identification
• Project evaluation and selection
• Project planning
• Project implementation/execution
• Project monitoring and control
• Project review
• Project management software

References:


MS 6220 COMPETITIVE INTELLIGENCE AND STRATEGIES (4-0-0-2)

Objectives:
The objective of the course is to provide insights into competitive strategies, design and implementation of Competitive Intelligence (CI) mechanisms as well as development of early warning systems in corporations. Inputs on CI needs of business firms and ways to protect a company’s secrets or intellectual assets will be provided. Students will be exposed to tools and techniques related to compiling and packaging of competitive intelligence information with due emphasis on ethical imperatives.

Contents:

• Competitive Advantage and Strategies: Sources of competitive advantage (Economies of Scale, Supply-side and Demand-side perspectives) – Assessing
competitive advantage – Co-Creation of Value and Experience Innovation – Analytical tools and frameworks – Cooperation – Pricing strategies.

- **Competitor Analysis:** Competitive benchmarking techniques – Capabilities and competencies – Activity/Value chain – Technology strategy – Resources and assets – Organizational infrastructure – Alliances and relationships – Culture.

- **Competitive Intelligence (CI) Mechanisms:** Origins of industrial espionage – Crisis management – Ethical imperatives – National, industrial, and firm perspectives – Major CI sources and channels – Global case studies.

- **Design and Implementation Challenges:** CI Code of Ethics – Organizing the CI team – CI processes – Gathering internal and external information – Roadmap for implementation – Integration of CI systems with information systems.

- **Early Warning Systems:** Business risk assessment – Business blind spots – Guarding company’s secrets and intellectual assets – Design and development of early warning systems – Case studies and examples.

**Text books:**


**References:**

MS 6320 FUNDAMENTALS OF EXPERIMENTATION (4-0-0-2) FOR MANAGEMENT

Objectives:
This course introduces the principles and practice of experimentation in a management context. The first phase of the course will provide a qualitative understanding of experimentation as a decision-making tool and its use in driving innovation within organizations. The second phase of the course will introduce students to various practical techniques and tools to conduct experiments.

Contents:

- Basics of an Experimental design:
  - Basic single variable experiments: The one sample t-test, two sample t-test, paired t-test, and Permutation test
  - Design of Experiments (DOE)
  - Concepts of Randomization, Replication, Repetition, Blocking, Confounding, and Interactions.
- Traditional DOE methods for quantitative and qualitative variables:
  - Basic full factorial, fractional factorial, and screening designs
  - Methods of analysis: ANOVA, multiple regressions
- Contemporary topics and methods in experimental design:
  - Taguchi Methods
  - EVOP
  - Response Surface Methodology
  - Optimal Learning
  - Reinforcement Learning
  - Algorithmic approaches to Experimentation

Text book:

References:

**MS 6470 SIX-SIGMA AND LEAN WORK** (4-0-0-2)

**Objectives:**

This course is offered to enable students understand the importance and use of Six-Sigma, Lean Work and Lean Six-Sigma in business and industry. It will also enable them to initiate and participate in workplace business improvement projects.

**Contents:**

- **Six Sigma**
  - Six Sigma – Basics and Business metrics
  - Plan of a project/portfolio
  - The DMAIC Method (all Phases in detail)
  - Design for Six Sigma (DFSS)
  - The DMADV model (all Phases in detail)

- **Lean Work – Principles, Concepts and Practices**
  - Eight types of waste
  - TRIZ
  - Lean Practices – Examples and Case Studies

- **Lean Six Sigma**
  - Integration of Lean and Six-Sigma
  - Lean Six Sigma tools
  - Deployment principles and Success stories

**References:**

Objectives:
The purpose of this course is to provide students with a basic understanding of how companies become global and manage a global business. This knowledge is necessary in the current context of globalization, the attendant business models and socio-economic scenarios.

Contents:

- MNCs – Organization structure - International regulations, Taxations – sovereign risk.
- Global organization strategy, production strategy, marketing strategy, financing strategy and HRM strategy.

References:

GENERAL ELECTIVE

MS 6990 MANAGEMENT RESEARCH PROJECT

Objectives:

This project-based course would be offered to second year MBA students. This course has three objectives. First, it encourages MBA students to do independent work under the guidance of a faculty supervisor in an area/topic of their interest, where elective courses are currently not being offered. Second, it provides interested students with an opportunity to develop a deeper and a more critical understanding of specialized interdisciplinary topics in management, beyond the coverage provided in coursework. Third, it permits MBA students to do further work on their term papers, which they submit as a part of their coursework.

Contents:

Project topics would encompass all areas of management including:

- Commodity Markets
- Globalization Strategies of Indian Companies
- Strategies in Outsourcing/Multi-sourcing
- Corporate Performance Management (Economic Value Added)
- Corporate Governance
- Business Ethics
- Management Wisdom
- Corporate Social Responsibility
- Business Innovation
- Organizations of the Future
- Bottom-of-the-Pyramid Markets
- Networked Innovation Systems

References:

Would be decided by the student and faculty supervisor based on project topic and scope.