Master of Business Administration (Information Technology)
Course Structure

Semester-I

Course Code	Subject	Credits
BAM 756	Disaster Management	2(1+1+0)
BAM 754	Organizational Behavior	4(4+0+0)
BAM 752	Business Communication	4(4+0+0)
MAS-602	**Mathematics for Management***	**4(4+0+0)**
MBA 702	Personality Development	2(1+1+0)
MBIT 710	**Networking & Network Security***	**4(4+0+0)**
COMP 725	Information System Analysis & Design	3(2+1+0)
		23

Semester-II

Course Code	Subject	Credits
BAM 767	Human Resource Management	4(4+0+0)
BAM 701	Financial Management	4(4+0+0)
BAM 762	**Operations Management**	**4(4+0+0)**
BMIT 711	Business Marketing & Key account Management	4(4+0+0)
BMIT 712	Business Process Analysis	4(4+0+0)
BAM 750	Managerial Economics	4(4+0+0)
BAM 729	**Research Methodology***	**4(4+0+0)**
COMP 733	Database Management Systems	5(3+1+2)
		33

Semester-III

Course Code	Subject	Credits
MBA 703	Business Analytics	3(3+0+0)
BAM 859	**Entrepreneurship & SBM***	**4(4+0+0)**
FS 845	Information Security Laws & Practices	3(3+0+0)
MBEB 701	Introduction to E- Business	3(3+0+0)
COMP-708	Network Standards & Compliance	3(3+0+0)
BMIT 713	Business Applications for Extended Enterprises	4(2+2+0)
COMP 841	Software Engineering	3(2+1+0)
BAM 780	Seminar I*	1(0+1+0)
*Summer Training Project Seminar Winter Project/ Dissertation: 4 weeks		**24**

Semester-IV

CourseCode	Subject	Credits
COMP 807	Business Intelligence (Data mining & Warehousing)	4(2+1+2)
BMIT 714	Strategic Management & Information System Strategy	4(4+0+0)
BMIT 716	**Business Simulation Using System Dynamics***	**4(4+0+0)**
COMP 808	Digital Infrastructure & ERP	4(3+0+2)
BMIT 715	Information Risk Management	4(4+0+0)
	Open Elective* (HTML/ CSS)	3
BAM 883	Seminar II	1(0+1+0)
BAM 820	Project Report	10(0+0+20)
BAM 884	Comprehensive Viva Voce	1(0+1+0)
		35

Master of Business Administration (Information Technology) Syllabus

MBA (IT) 1ˢᵗ Semester

MAS-602   **Mathematics for Management**   **CREDIT 4 (4+0+0)**

Course objective: The objectives of the course are to equip the students with the mathematical and statistical techniques and their application to business problems. The emphasis will be on the concepts and application on real time problems

Unit 1: Frequency Distribution & their analysis
- Mean, Individual Series, Discrete series Continuous series
- Median, Individual Series, Discrete series Continuous series
- Mode, Individual Series, Discrete series Continuous series

Unit 2: Probability
- Introduction
- Calculation of probability
- Addition of probability
- Multiplication of probability
- Conditional probability

Unit 3: Determinations Matrices
- Introduction of Matrix,
- Various types of Matrix
- operations of matrix
- Addition
- Subtraction
- Multiplication
- Determinants
- Minor
- Co-factor
- Value of determinants

Unit 4: Linear Equations
- Linear equation by substitution method
- Linear equation by elimination method

Unit 5: Differentiation & Derivative
- Derivatives of functions
- derivative of exponential and algorithm functions
- Derivative of inverse trigonometric functions

Unit 6: Integration
- Methods of integration
- Integration using trigonometric identity
- Integration by parts

Unit 7: Multiple Regression & Correlation Analysis
- coefficient of multiple correlation
- Advantage & limitation of multiple corerelation
- Multiple regression analysis
- Advantage & limitation of regression analysis

Unit 8: Time Series Analysis
- Component of time series, Merits and limitations
- Methods of semi average
- Method of simple average,
- Ratio to trend method

Unit 9:Test of Hypothesis
- Chi square,
- T test,
- F test

Unit 10: Progression & Annuity
- Annuity Certain
- Annuity Contigent,
- Annuity Perpetual

Suggested Readings

1. David Levine, T. Krenbil, P.K.Viswanathan, Business Statistics, Pearson Education, 2008.
2. S.P. Gupta, "Statistical Methods", New Delhi, Sultan Chand and Sons, 2007
3. S.C. Gupta,Business Statistics, Himalaya Pub House, 2008
4. T.N.Srivastava, Statistics for Management, TMH, 2008
5. J. N. Kapur and H. C. Saxena. "Mathematical Statistics", New Delhi, Sultan Chand and Company Ltd.,
6. R. Jayprakash Reddy and Y. Mallikarynna Reddy, "A Text book of Business Mathematics", New Delhi, Ashish Publishing House
7. K. B. Dutta, "Matrix and Linear Algebra", New Delhi, PHI Learning
8. D. C. Sancheti and V. K. Kapoor, "Statistics: Theory, Methods and Applications",New Delhi: Sultan Chand and Sons.,
9. D.N. Elhance, Veena Elhance and B. M. Aggrawal, "Fundamentals of Statistics", Allahabad: Kitab Mahal

BAM 754   **Organizational Behavior**   **Credits: 04 (4-0-0)**

Course Objective
1. To identify the specific steps managers can take to motivate employees
2. To apply the different concepts of organizational behavior at work place

Unit I: Managing Organizational Behavior:
- Definition, Key elements of OB, Need for studying OB, Contributing Discipline.
- Organization behavior process.
- Organization, Management and organizational Behavior.
- Theories of Management leading to organization Behavior.
- Models of Organization behavior.

Unit 2: Perception:

- Introduction: What is perception? , Why should Managers Study perception? How perceptions differ from Sensation?
- Factors affecting perception, How to improve perception?
- Perception and its application in OB
- Perception Process, Errors of perception.

Unit 3 Learning:
- Meaning and Definition , Importance of learning , barriers of learning
- Determinants of learning , Approaches of learning
- Theories of learning, How do people differ in how they learn?
- Contingencies of Reinforcement

Unit 4: Motivation:
- Meaning of Motivation , Nature of Motivation , Motivation process
- Theories of Motivation : Need hierarchy Model by Abraham Maslow , Dual factor theory by Frederick Herzberg
- Alderfer's ERG Model of motivation
- Application of Motivation: Motivation By goal setting, why goal setting is important, basic feature of goal setting process.
- Limitation to goal setting.

Unit 5: **Leadership:**
- Introduction: What is leadership? Difference between Leader and Manager
- Trait Perspective of leadership : Leadership traits and its effectiveness , Leadership style,
- Behavioral Perspective of leadership : Ohio State university ,Managerial Grid
- Leadership Theories.
- What make leadership effective? Transformational Versus Transactional leadership

Unit 6 Team and Group:
- Definition and characteristics of group , why do people form and join groups
- Theories of group formation
- Stages of group development
- Group Behaviour: Group Norms, Group cohesion, Group Role, Inter group Conflicts.

Suggested Reading
1. *Kavita Singh.Organisational Behaviour text and cases*
2. *Organisational Behaviour Text and Cases Dr. S.S.Khanka*
3. *Understanding organization Behaviour Udai Pareek*

BAM 752   **Business Communication**   **credits 4(4+0+0)**

Course Objective: - Effective communication is the major quality of an effective leader or manager. This course helpful for management students to learn basics of business communication, importance of effective communication, and what are the theories and principles for business communication.

Unit: 1
Concept of communication, objective,
Defining communication
Role of communication, Importance of effective communication
Objective of Communication (Downward, Upward, Horizontal, Vertical, Grapevine)

Unit: 2

External Communication

Essential features of modern business

Process of communication(Encoding, decoding, Transmitter, Two-way communication)

Unit: 3

Barriers to Communication (External Barrier's and Psycho-Sociological Barriers)

Defects in the Channel, Noise

Self-centred Attitudes

Group identification

Self-image

Status Block

Closed Mind

Poor Communication Skills

State of Health ,Overcoming barriersWritten Communication

Unit: 4

Notice, Agenda

Minutes,(essential part of a minutes which should never omitted) Memorandum

Tender, (Details required while inviting a tender)

Tender, (Details required while inviting a tender)

Oral Communication

Dyadic Communication, Meeting, Seminars

Conference, Group discussion, Audio-Video Aids

Unit: 5

Non-Verbal Communication

Personal Appearances,

Posture, Gesture, Facial Expressions- Discussion

MBAIT 710   NETWORKING AND NETWORKING SECURITY   CREDIT: 4 (4-0-0)

Objectives:
- To understand the latest technologies related to network security
- To understand the IEEE 802.11 security
- To understand the GSM and UMTS security
- To understand IDS, IPS
- To understand Computer Forensics

UNIT I
Control hijacking attacks: exploits and defenses, Dealing with legacy code: sandboxing and isolation, Principle of least privilege, access control, and operating systems security, Exploitation techniques and fuzzing.

UNIT II
Web Security -Basic web security model, Web application security, Content Security Policies (CSP), Web workers, and extensions, Session management and user authentication, LAN Security.

UNIT III

Overview of cryptography, Network security-Security issues in Internet protocols: TCP, DNS, and routing, Network defense tools: Firewalls, VPNs, Intrusion Detection, and filters, Unwanted traffic: denial of service attacks.

UNIT IV

Security of mobile platforms- Mobile platform security models: Android and Ios, Mobile threats and malware: viruses, Spyware and key-loggers.

TEXT BOOKS:

1. Network Security and Cryptography: Bernard Menezes, CENGAGE Learning
 2. Computer Network Security: Joseph Migga Kizza, Springer link

REFERENCE BOOKS:
1. Cyber Security: Nina Godbole, Sunit Belapure, Wiley India.
2. Network Security Hacks: Andrew Lockhart, O'Reilly, SPD.
3. Cryptography and Network Security : Forouzan Mukhopadhyay, Mc Graw Hill, 2nd Edition
4. Principles of Computer Security: WM.Arthur Conklin, Greg White, TMH
5. Wireless Security-Models, Threats, and Solutions: Randall K.Nichols, Panos C.Lekkas, TMH
6. Computer Security: Dieter Gollman, 2nd Edition, Wiley India
7. Computer Evidence: Collection & Preservation, Christopher L.T.Brown, Firewall Media

COMP 725   Information System Analysis & Design   Credit 3 (2+1+0)

Course Objective: This course aims to deliver the students to acquire knowledge in necessary systems analysis and design life cycle, structured systems analysis and security of information systems.

Unit 1: Data and Information:

Types of information: operational, tactical, strategic and statutory. Why do we need information systems. Requirement of information at different levels of management, Requirement of information for various functions. Quality of information.

Unit 2: Systems Analysis and Design Life Cycle:

Requirements determination, requirements specifications, feasibility analysis, final specifications, hardware and software study, system design, system implementation, system evaluation, system modification. Role and attributes of a systems analyst.

Unit 3: Information Gathering:

Strategies and methods. System requirements specification. Feasibility analysis: Deciding project goals, examining alternative solutions, cost – benefit analysis, quantifications of costs and benefits, payback period, system proposal preparation for managements, parts and documentation of a proposal, tools for prototype creation. Data flow diagrams: rules and conventions, levels of DFDs, logical and physical DFDs. Software tools to create DFDs.

Unit 4: Structured systems analysis and design:

Procedure specifications in structured English, decision tables for complex logical specifications, specification oriented design vs procedure oriented design. Data oriented systems design: Entity relationship model, E-R diagrams, relationships, cardinality and participation, normalizing relations and their use. Coding Practices: Coding techniques, requirements of coding schemes, error detection of codes Data input methods: Input Design, validating input data, input data controls, interactive data input. Designing outputs: Designing output reports- screen design, graphical user interfaces, interactive I/O on terminals.

Unit 5: Control, Audit and Security of information systems:

Need for controls, objectives of controls, techniques used in controls, Gantt chart, PERT. Auditing information systems. Testing information systems – types of tests, generating test cases. Security of information systems. Disaster and recovery management. Ethics in system development

MBA-702 **Personality Development** **Credit: 2 (2+1+0)**

Course Objectives:

This course is especially helpful for those who are striving to learn more about who they are, which direction their life should take, to learn more about others around them, or even if they work in human resources and want to learn more about personalities and how it may impact who they hire.

Unit-I: Personality

- Concept: Determinants
- Recognising the social Value of Personality
- What is Personality
- Personality verses Character
- Personality verses Individuality

Unit-II: Leadership

- Introduction to leadership
- Leadership Power
- Leadership Styles
- Leadership in Administration

Unit-III:Interpersonal Relations

- Introduction to Interpersonal Relations
- Analysis Relations of different ego states
- Analysis of Transactions
- Analysis of Strokes
- Analysis of life positions

Unit-IV: Communication

- Introduction to Communication
- Flow of Communication
- Listening
- Barriers of Communication
- How to overcome Barriers of Communication

Unit-V: Stress

- Introduction to Stress
- Causes of Stress
- Impact Management for Stress
- Managing stress

Unit-V: Group Dynamics

- Importance Groups in organisations
- Team interactions in Group
- Group Building Decision Taking
- Team Building
- Interaction with the team
- How to build a good team

Unit-VI: Conflict

- Introduction to Conflict
- Causes of Conflict
- Managing Conflict

Unit-VII: Performance

- Introduction to Performance Appraisal
- Vertical Appraisal
- Horizontal Appraisal
- 360° Performance Appraisal
- Methods or Techniques of improving Performance Appraisal

Unit-VIII: Time

- Time as a resource
- Identify important Time Management
- Individual Time Management Styles
- Techniques for better Time Management

Unit-IX: Motivation

- Introduction to Motivation
- Relevance and Types of Motivation
- Motivating the Subordinates
- Analysis of Motivation

Suggested Readings:

1. Personality Development: Alok Kumar Singh.

2. Hand Book of Personality: Theory and Practices- Oliver P. John, Richard W. Robins, Lawrence A. Pervin

BAM-756   **Disaster Management**   **Credit: 2 (1+1+0)**

Unit 1. Introduction to Disaster Mgmt.:

Introduction and Concept of Disaster Management, Definitions of Disaster & Disaster Mgmt., Objectives of Disaster Mgmt., Importance of the study of Disaster Mgmt., Scope of Disaster Mgmt., Disaster Cycle

Unit 2.Types of Disasters:

Natural Disasters (Earthquake, Landslides, Flood, Drought, Tsunami, Cloud Bursting**),** Man – made Disasters (Industrial, Chemical, Nuclear Disasters, Forest fires, Deforestation)

Unit 3. Factors responsible for Disasters:

Environmental Factors - Climate change, Pollution (Air, Water, Soil), Geographical Factors – Geographical Distributions of Areas (Hill Areas, Sea Coastal Areas, Desert habitats)

Unit 4. Effects of the Disasters:

Economical effects, Social effects, Geographical effects

Unit 5. Biological Disasters:

Pest Attacks, Viral infections, Bacterial Infections

Unit 6. Disaster related Awareness:

Medium for Awareness, Responsible Authorities, Communication role of media

Unit 7.Disaster related Preventions:

Preparedness, Vulnerable Areas, Damage assessment, Rehabilitation & Reconstruction, Allocation of resources, Resource Implementation, Role of Govt. &non- governmental organisations, Contingency Plan & Case Studies

Master of Business Administration (Information Technology)
Syllabus

MBA (IT) 2nd Semester

BMIT 711   **Business Marketing & Key Account Management**   **Credit 4 (4+0+0)**

Course Objective: This course aims to conceptualise students to acquire knowledge and skills necessary in Industrial Marketing, Industrial buying, Market Segmentation, Formulating Product Planning, Formulating Channel Strategy; and Pricing and Promotional Strategies

UNIT 1:

Dimensions of Industrial Marketing: Nature of Industrial Marketing, Industrial Marketing vs. Consumer Marketing, Economics of Industrial demand – The Resellers Market – The Industrial Marketing Concept, Understanding Industrial Markets, Types of Industrial Markets, Classifying Industrial Products, Organizational Procurement Characteristics – The Industrial Marketing Environment, Environmental effect on Industrial Market with special reference to Government rule.

UNIT 2:
Nature of Industrial buying: Organisational buying Activity, Buying models and buying centre concept, Inter Personal Dynamics of Industrial Buying Behavior, Roles of Buying centre, Conflict Resolution in Decision Making Ethics in Purchasing

UNIT 3:
Market Segmentation: Choosing Target Segments, Positioning, Differentiated and Un-Differentiated Markets, Concentrated and Niche Markets, Positioning Strategies, Difference between Industrial Market Research and Consumer Market Research

UNIT 4:
Formulating Product Planning: Developing Product Strategy, Analyzing Industrial Product Life Cycle, Developing Strategies for new and existing products, Business Service Marketing: Special Challenges

UNIT 5:
Formulating Channel Strategy: Industrial Distributor, Definition, Geographical Distribution, Size Characteristics, operating characteristics, Role of Sales Agent and their drawbacks, choice of the right Distributors, Participation of other Channel Members in Industrial Distribution- Channel Logistics- Relationship of Logistics & Physical Distribution, Total Cost approach customer service, assessing the customer service, Identifying the cost centers.

UNIT 6 :
Pricing Strategies: Price Determinants, Factors that Influence the Pricing Strategies, concept of learning curves, Pricing Strategies, Competitive Bidding, Leasing

UNIT 7:
The Promotional Strategies: Advertising in Industrial Markets, uses, Message Formulation, policies, media ,budgetary support, evaluation of advertising- sales Promotion- Use of Sales Promotion in Industrial Markets, trade shows and exhibitions B 2 B Forms of E-Commerce

UNIT 8:
Management of Sales Force: Managing the Industrial Sales Force, Organizing and controlling the industrial sales force activity, planning for the sales force Deployment. Personal Selling: Selecting and Recruitment of Industrial sales person, sales training, Directing, Motivating, Task Assignment, Compensation, Measuring the Effectiveness of Sales Force. Relationship Sales and Marketing, Four forms of Seller Roles

UNIT 9:
Introduction to Key Account Management, Identification of key accounts KAM strategy, Development of key accounts

UNIT 10:
Customer relationship management, The role of key account managers – skills and characteristics, the sales process

UNIT 11:
Customer perspective on KAM, Account profitability, Organizing the KAM function Negotiations, Category management, Space Management

Text Books:
Marketing Management (Pearson) by Philip Kotler, Kevin Keller, Koshy and Jha (ISBN 978-81-317-6716-0)
Marketing Management by Rajan Saxena

BAM 761   FINANCIAL MANAGEMENT   CREDIT 4 (4+0+0)

Unit 1. Nature and Scope of Financial Management, Financial decision making, Objective of Financial Management, Role of finance manager

Unit 2. Overview of Financial System: Financial Asset, Financial Market, Financial Intermediary, Regulatory Framework

Unit 3. Basic Concepts of Valuation: Time Value of Money, Risk and Return , Measurement of Risk
Unit 4. Sources of Financing: Long term sources and short term sources

Unit 5. Capital Structure: Theories of Capital Structure :Factors determining capital structure, Leverage Analysis, EBIT-EPS Analysis, Cost of capital

Unit 6. Capital Budgeting: Types of capital budgeting decisions, Process of Capital Budgeting decisions, Techniques of Evaluation, Risk Analysis in Capital Budgeting

Unit 7. Working Capital Management: Concept of Operating cycle and working capital needs, Factors affecting working capital requirement, Approaches of financing working capital. Estimation of working capital requirement. Cash, inventory and receivables management.

Unit 8. Dividend decisions and Valuation of Firms : Determinants of Dividend Policy. Relevance and Irrelevance Theory

Reference Books:
1. Brealey, Richard A and Steward C Myers: *Corporate Finance*, Mc Graw Hill.
2. Pandey. I. M : *Financial Management*, Vikas Publishing House
3. Khan M Y, Jain P K: *Financial Management* , Tata McGraw Hill

| BAM 767 | Human Resource Management | Credit 4(4+0+0) |

Unit 1 *Evolution and Strategies*

Chapter 1 Introduction of HRM
Definition, meaning, nature and Scope. Evolution of HRM difference between HRM & Personnel Management, objectives, functions of HRM, HRM Models

Chapter 2 Strategic Role of HRM
Meaning of strategic management, Benefits of strategic management, Role of HRM in strategic management Components of HRM, HR strategies

Unit 2: Acquisition and Absorption

Chapter 3   Man power planning
Definition, need, objectives, Methods of man power planning, Process, Manpower plan components, Problems, limitations of Man power planning Calculation of man power.

Chapter 4 Job analysis
Nature, process, importance of job analysis**,** Methods of data collection for job analysis, potential problems with job analysis, competency based job analysis **,**Job description and job specification**,** Job design significance**,** Factors, approaches of job design **,**Job enrichment and job enlargement, Job evaluation process and methods **.**

Chapter 5 Recruitment, Selection
Meaning, objectives& factors affecting Recruitment, Theories regarding Recruitment, Methods of recruitment steps on recruitment process, Nature and importance, difference between recruitment and selection& steps in selection process, Placement ,Induction, promotion and transfer.

Unit 3: Development

Chapter 6 Training and Development
Meaning, Nature and importance of training and development Training process**,** how training needs are identified, Methods of training**,** Effectiveness of training programme

Chapter 7 Performance Appraisal
Meaning nature, importance & purpose of performance Appraisal, Methods of Performance Appraisal
Challenges and legal issues in Performance appraisal, Promotion transfer and demotion. Job satisfaction, job Enrichment, Job empowerment

Chapter 8 Wage and salary Administration
 Objective of wage and salary administration, principles of wage and salary administration
Different components of wage and salary administration, Theories of wages, Factors that influence wage and salary.

Chapter 9 Employee Safety and Health
Meaning and importance of employee health, occupational Hazards and diseases, Industrial accidents and industrial injury , Safety programme/ Measures and Statutory provision for industrial health.

Chapter 10 Human Resource Audit
Nature of human resource Audit, benefits of HRA, Scope of Audit, Approaches of human resource audit

Reference Books:

1. K Aswathappa Human Resource Management Mc Graw Hill
2. Gary Dessler, Biju Varkkey Human resource Management Pearson
3. Dr. S.S KHANKA HUMAN RESOURCE MANAGEMENT S CHAND

BAM 762   **Operations Management**   **Credits   4(4+0+0)**

Unit I: Operation Function
Introduction to Operation Management, Nature & Scope of Operation/ Production Management, Relationship with other functional areas, Recent trend in Operation Management, Manufacturing & Theory of Constraint, Types of Production System, Just in Time (JIT) & lean system

Unit II: Operation Strategy
Strategic Consideration, Global Strategies, Need Assessment, Service Strategy, Manufacturing Strategy.

Unit III: Product Design
Product Design & Process Selection, Stages in Product Design process, Value Analysis, Facility location & Layout: Types, Characteristics, Advantages and Disadvantages, Work measurement, Job design.

Unit IV: Process Selection
Process Choice, Process Decision, Job Design, Process Manufacturing, Analysing Cost time trade off Job Design Consideration, Selecting Competitive Priorities.

Unit V: Service Process Design
Role of Service, Service strategy, Assemble to order strategy, Operation strategy, Customized Strategy , Resource flexibility, Customer involvement.

Unit VI: Forecasting

Forecasting & Capacity Planning, Methods of Forecasting, Overview of Operation Planning, Aggregate Production Planning, Production strategies, Capacity Requirement Planning, MRP, Scheduling, Supply Chain Management, Purchase Management, Inventory Management.

Unit VIII: Aggregate Planning

Material Requirement Planning, Lot Sizing Rules, Safety Stock, Bill of Materials, Links to functional Areas Planning Lead time, Capacity Reports.
Reference Books Krajewski & Ritzman (2004). Operation Management – Strategy and Analysis. Prentice Hall Of India.
2. Charry, S.N (2005). Production and Operation Management- Concepts, Methods & Strategy. John Willy & Sons Asia Pvt . Limited

BAM 750	MANAGERIAL ECONOMICS	CREDIT 04 (4-0-0)

Course objective: *the course aims to make students aware of the market by mechanism, size, behavior etc. to impart through interactive class room discussions, ideas about both demand and supply side issues and instruments in micro and macro-economics, particularly keeping in mind the need of managers in the area of business management.*

UNIT I - INTRODUCTION TO ECONOMICS
- Economic background to management
- Fundamental Concepts
- Meaning and nature of managerial economics and its relationship with other disciplines
- Nature & scope
- Significance in decision making, Applications/uses

UNIT II - MICRO ECONOMIC ANALYSIS
- Meaning
- Nature and scope
- Application and uses

UNIT III - DEMAND ANALYSIS
- Meaning & Concept
- Demand Theory- Law of demand
- Demand function
- Individual and market Demand Schedule
- Law of demand
- Application/uses
- Bandwagon Effect and Snob Effect
- Market Demand Externalities

UNIT IV - DEMAND ELASTICITY
- Meaning
- Scope & relevance
- **Price elasticity**- Meaning, nature & scope, measurement of price elasticity, factors affecting price elasticity of demand, Practical examples and applications.
- **Income elasticity**- Meaning, Nature & scope, measurement of income elasticity, factors affecting income elasticity of demand, Practical examples and applications

Cross elasticity- Meaning, Nature & scope, measurement of Cross elasticity, factors affecting Cross elasticity of demand, Practical examples and applications

UNIT V - PRODUCTION ANALYSIS
* Meaning
* Factors of production
* Production Function and its managerial use
* Short run analysis- Laws of production
  Long run analysis-Returns to scale

UNIT VI - COST ANALYSIS
* Meaning & concept
* Types of costs
* Cost Function and its managerial use
* Implications for managers
* Use in decision making
* Short run analysis-meaning, Graphical explanation
  Long run analysis-meaning, Graphical explanation

UNIT VII - MARKET STRUCTURE AND PRICING DECISIONS
* Meaning & concept
* Pricing under different market structures
* **Perfect competition**- Meaning & concept, short run analysis, long run analysis, Applications, Implications for managers, Use in decision making
* **Monopoly** - Meaning & concept, short run analysis, long run analysis, Applications, Implications for managers, Use in decision making
* **Monopolistic competition**- Meaning & concept, short run analysis, long run analysis, Applications, Implications for managers, Use in decision making
  Oligopoly- kinked demand curve, Price rigidity, Stickiness of price

UNIT VIII – FIRMS/MACRO-ECONOMICS
* Alternative goals of firms: Profit maximization, Sales maximization
* Administered price
* Demand Forecasting
  Fundamental concepts of macro-economics: Business Cycles, inflation, stagflation, economic forecasting for business

Reference Books:
1. Davis, H.: Managerial economics, ELBS-Pitman.
2. Dornbusch Rudiger: Macro economics
3. Koutsoyiannis: Modern Micro Economics
4. Lipsey: An introduction to a positive economics
5. Samuelson Nordhaus: Economics
6. Mithani, D.M-Managerial Economics-Theory and Application

BAM-729   **Research Methodology**   **Credit: 4 (4+0+0)**

Unit 1
- Scientific Approach-Science and Common sense, Four Methods of knowing, Scientific Approach, Meaning of Research, Objectives of Research, Significance of Research, Research Process, Criteria of Good Research.

Unit 2
- Types of Research – Exploratory, Conclusive;
    - Descriptive: Cross sectional Design, Longitudinal design, Cohort Study
    - Casual: Independent/ dependant Variables, Control, Intervening variables.
    - Qualitative/Quantitative etc.

Unit 3
- Formulation of Research Problem, Setting of Objectives, Hypotheses-Importance & Formulation.

Unit 4
- Sampling Design – Census and Sample survey, Steps in Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of Sample Design: Probability/Non-Probability sample design, How to select a random sample, Complex Random Sampling Designs.

Unit 5
- Measuring and Scaling Techniques – Measurement in Research, Measurement Scales, Sources of Error in Measurement, Tests of sound measurement, Techniques for developing measurement tools, Scaling - meaning, classification, important scaling techniques, scale construction:- Likert, Thurston.

Unit 6
- Methods of Data Collection – Different methods of Primary data collection: Observation, Interview, Questionnaire, Schedules, Collection of Secondary Data.

Unit 7
- Processing and Analysis of Data – Processing Operations, editing, tabulation etc. Problem in Processing, Statistics in Research, Measures of Central Tendency, Measure of Dispersion, Measures of relationship, simple regression analysis, multiple correlation and regression, partial correlation.

Unit 8
- Chi-square test, t-test, and Analysis of Variance (ANOVA) and Covariance (ANOCOVA), time Series Analysis.
- Multivariate Analysis of Data

Reference Books:-
1. Foundation of Behavioural Research by Fred N. Kerlinger
2. Marketing Research – An Applied Orientation by Naresh K. Malhotra
3. Research Methodology-Methods and Technique by C.R. Kothari

BMIT 712   **Business Process Analysis**   **Credit 4 (4+0+0)**

Course Objective: This course aims to deliver the students to acquire knowledge in necessary Diagramming Processes, Select a target process for improvement, Identify interacting processes; and determine the goals of the new process.

UNIT 1: Introduction and Background

Background, What are processes, Goals of process analysis, What is business process modeling, Cutting across business groups

UNIT 2: Methods of Diagramming Processes

Yourdon diagrams, Basic Flowcharts, Timelined flowcharts, Geographic flowcharts, Swimlane diagrams, Value Stream Analysis

UNIT 3: Framing the Process

Learn how to identify processes and their interactions, Select a target process for improvement, ocument the enterprise strategy, goals, and objectives, Initial assessment of process by stakeholders, Determine process goals, describe the process environment, Develop an initial conceptual data model

UNIT 4: Developing the "As-Is" Process

Build process flowchart diagrams, Identify process steps, Identify process inputs, Identify process users, Identify process goals, Identify process data requirements, Identify interacting processes

UNIT 5: Creating the "To-Be" Process

Determine the goals of the new process, Decide on the approach, Developing ideas for the new process, Defining the key features of the new process, Identify interacting existing processes, Crossing organization boundaries, Identifying the new stakeholders Developing the new workflow, Identifying the new inputs, outputs, and data requirements, Identifying steps that can be automated, Revising the conceptual data model

UNIT 6: Developing the Detailed Requirements

Creating process scenarios, Use Cases, Identifying use case name, actor, description, main steps, alternate steps.

COMP 733   **Database Management System**   **Credit 5 (3+1+2)**

Course Objective: This course aims to deliver the students to acquire knowledge in necessary Database system concepts and architecture, relational data model and languages; and to understand various Functional dependencies in DBMS.

UNIT- I Introduction:

An overview of database management system, database system Vs file system, Database system concepts and architecture, data models, schema and instances, data independence and data base languages, Data definitions language, DML, Overall Database Structure. Data Modeling using the Entity Relationship Model: ER model concepts, notation for ER diagram, mapping constraints, keys, Concepts of Super Key, candidate key, primary key, Generalization, aggregation, reduction of an ER diagrams to tables, extended ER model.

UNIT- II Relational Data Model and Languages:

Relational data model concepts, integrity constraints: entity integrity, referential integrity, Keys constraints, Domain constraints, relational algebra, relational calculus, tuple and domain calculus, Introduction to SQL: Characteristics of SQL, Advantages of SQL, SQL data types and literals, Types of SQL commands, SQL operators and their procedure, Tables, Views and Indices, Queries and sub queries, Aggregate functions, Insert, update and delete operations. Set Operations: Union, Intersection, Minus.Join Operations, Cursors in SQL.

UNIT- III Data Base Design & Normalization:

Need of Normalization, Various Functional dependencies, Normal forms: first, second, third normal forms, BCNF, inclusion dependences, loss less join decompositions, normalization using MVD, and JDs, alternative approaches to database design.

UNIT- IV Transaction Processing Concepts:

Transaction system, Testing of serializability, Serializability of schedules, conflict & view serializable schedule, recoverability, Recovery from transaction failures, log based recovery, checkpoints, deadlock handling.

UNIT- V Concurrency Control Techniques:

Concurrency control, locking Techniques for concurrency control, Time stamping protocols for concurrency control, validation based protocol, multiple granularity, Multi version schemes, Recovery with concurrent transactions.

Master of Business Administration (Information Technology) Syllabus

MBA (IT) 3rd Semester

MBA 703   **Business Analytics**   **Credit: 03 (3-0-0)**

Course Objectives:

1. To provide an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making.
2. To provide an understanding of the processes needed to develop, report, and analyze business data.

Unit 1: Overview of Business Analytics:
- Definition, Evolution, Architecture, Benefits, Future.
- Business, Analytics as Solution for Business Challenges.
- Effective Predictive Analytics, Integrating Analytics in Business Processes, Unstructured Data Analytics, Balanced Scorecard, Dashboards, KPI based on Dashboard and Scorecard,
- LOFT effect, Data Quality, Master Data Management, Data Profiling.
- Why are Business Analytics important

Unit 2: Descriptive Analytics, Predictive Analytics and Prescriptive Analytics:
- Introduction to Descriptive Analytics, Visualizing and Exploring Data, Descriptive Statistics, Sampling and Estimation, Introduction to Probability Distributions
- Introduction to Predictive Analytics, Predictive Modelling (Logic-driven models and data driven models)
- Introduction to Prescriptive Analytics, Prescriptive Modeling, Non-linear Optimization

Unit 3: Data Issues:
- Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Classification
- Data Warehouse: Definition, Features, Applications, Types of data warehouse,
- Architecture: Business Analysis framework, 3-tier data warehouse framework.
- Data Warehouse Models: Virtual Warehouse, Data Mart and Enterprise warehouse.
- Metadata: Meaning and Categories, Role of metadata, Metadata respiratory, Challenges for metadata management, Data Cube
- Online Analytical Processing Server (OLAP): Types, OLAP operations, OLAP Vs Operational Database (OLTP).
- SCHEMA: Star Schema, Snowflake schema, Fact Constellation schema

Unit 4: Data Mining and Testing: Definition, Concepts, Applications and Methods.

Unit 5: Security: Security requirements, User Access, Data classification, User Classification, Data Movement, And Impact of security on design.

Unit 6: Decision Modelling and Forecasting:
- Optimization: Using excel to solve business problems Eg: Marketing Mix, Portfolio optimization etc.
- Linear Programming: Introduction, Types of Linear programming problems/Models, Linear programming Model elements, Model formulation procedure, Computer based solutions for linear programming using Simplex method
- Duality and Sensitivity Analysis: What is Duality?, Duality and Sensitivity analysis problems

- Integer Programming: Introduction, Solving IP problems/Models
- Forecasting: Introduction, Types of Variation in Time series data, Simple Regression Model, Multiple Regression Models
- Simulation: Introduction, Types of Simulation
- Decision Theory: Introduction, Decision theory model elements, types of decision environments, decision theory formulation, decision making under uncertainty and risk, Decision trees.

Unit7: Fundamentals of R Language:
- Introduction, Basic Statistical Analysis using R, Process of Business Analytics,
- BA Process-Walk through with R,
- Multiple regression- Theory and Walk through with R,
- Clustering and Segmentation- Theory and Walk through with R

Suggested Readings:
1. Fundments of Business Analytics by RN Prasad and Seema Acharya, Wiley India Publication
2. Win With Advanced Business Analytics by Jean Paul Isson and Jesse S. Harroitt, Wiley Publication, 2013
3. Successful Business Intelligence: Secrets to Making BI a Killer App by Cindi Howson, Tata McGraw Hill Edition 2012
4. Analytics at Work by Thomas H. Davenport, Jeanne G. Harris and Robert Morison, Harvard Business Press

BAM -752   **Entrepreneurship & Small Business Management**   **Credit 4(4+0+0)**

Unit: 1

Concept of Entrepreneurship, history, Small Business Management

Meaning, Definitions

Importance, role for the development of the economic

Environment for Entrepreneurship

Unit: 2

Barriers for Entrepreneurship

Types of Entrepreneurs

Definitions, Theories of Entrepreneurs

Charactertics & Roll of Small Business

Unit: 3

New Ventures & Business Plans, Government Plans,& Policies Training Infra Structural
Entrepreneur development and Training
Institutional Assistance to Small Business
Sources of Information, Financial Institutions
Marketing Assistant

Unit: 4

Procedure for setting up Small Business

Rules & Regulations for S.B, Market Survey,

Preparation of Feasibility Report

Managerial Competence and Infrastructure

Text Book Recommended- Small Business Management by **Vasant Desai**
* Rai Bahadur Mohan Singh Oberoi Did All His Way
* Right Rails of Ravindra

FS 845   **Information Security Laws and Practices**   **Credit 3(3+0+0)**

Course Objectives:

This course aims to conceptualise students to acquire knowledge and skills necessary in cyber forensics compute, forensic model for law enforecement, cyber ethics; and understanding relationship between law and justice or morality.

Unit-1 Introduction & History:

Introduction to cyber forensics computer forensics in law enforement and national secuirty origin and history of computer forensic, the role computer forenics in law enforecement, principles of evedience juridictional

Unit-2 Priciples, Methodologies & Issues in Technology:

Computer forensic model for law enforecement, computer forensic secure and analyze, present (cisap) model, forensic examination, procedure analysis and presentation, forensic resources and tools, operating system duplication authentiction, search analysis, file review, computer forensic and national security, critical infrastruture, protection, national security computer forensic organizations, main issue in technology, education & society intellectual property in cyber space, privacy anonymity cyber space digital device

Unit-3 Cyber Ethics :

In Education, defination, dimensions, resources, differene between ethics and law, commandments of computer ethics, copyright, side effects of internet, issues in cyber ethics.

Unit-4 Jarisprudence of Cyber Law:

Law and legal system. The relationship between law and power. Relationship between law and justice or morality. Society legal system. Concepts legal rights and legal obligations or duties. The function of law . Sort of acts subjected to punishment and sort od punishments permitted. What is justice ? what rights do we have? Value of rule of law has

Unit-5 Cyber Laws and Digital Evidence in India :

Definition, why cyber law, need of cyber law. Indian cyber law admissibity of electronic records. Computer forensic for law enforement India IT Act 2000 Releated Case Studies

Reference Books:

1. Andrew S. Tanenbaum, "Computer Network", Prentice Hall of India
2. William Stallings, "Data and Computer Communication", Pearson Education

COMP 708   Network Standards & Compliance   Credit 3 (2+1+0)

Course Objectives:

This course aims to conceptualise students to acquire knowledge and skills necessary in computer network, Ethernet standards, TCP & UDP protocol; and understanding compliance with networking issues.

Unit-1

Need and importance of Computer Network. Type of Networks and Transmission Modes, Overview ISO-OSI Standard. Brief history ARPANET and evolution of TCP/IP Standard Protocol

Unit-2

Importance and need for setting network standards. Advantages of standards. Introduction to CCITT and ITU-T standard. IEEE society & some common standard. Requirement and need for network compliance.

Unit-3

An overview of Ethernet standards 802.3/4/5 for wired and wireless transmission 802.11. Internet standards: Internet protocol IRA, domain name system, standard for addressing.

Request for comments (RSC)

Unit-4

Introduction of TCP & UDP protocol. URI schemes. Web standards. World Wide Web consortium standards. Overview of standards protocol of application layer. Security standards.

Unit-5

Case Study of any business network organisation & the network & security standards adopted by it

Reference Books:

1. Andrew S. Tanenbaum, "Computer Network", Prentice Hall of India
2. William Stallings, "Data and Computer Communication", Pearson Education

MBEB 701   **Introduction to E-Business**   **Credits 3 (3+0+0)**

Course Objectives:

This course aims to conceptualise students to acquire knowledge and skills necessary in e-Business v/s e-Commerce, issues and challenges of e- Business EDI ; and understanding Security and ethical challenges of e-Business.

Unit 1:

Frame work of e-Business v/s e-Commerce, Traditional v/s e-Business Transactions, Infrastructural requirements for e-Business, issues and challenges of e- Business EDI: applications in Business, Implementation, Security, Standardization and Internet based EDI.

Unit 2:

Payments of the net: e-Transaction, Requirements of Payment Systems, Types of Payments, Implementation of payment systems, Risks of internet based payments, Control & Minimization.

Unit 3:

Security and ethical challenges of e-Business; Breach in Security and its remedies.

Unit 4:

Electronic market: Consumer and Business markets, e-ordering, marketplace for buyers and seller advertising and marketing on Internet, Distribution Chain, Customer support, Virtual Factories.

Unit 5:

Cyber Laws: Information Technology Bill 2000, UNO resolutions concerning cyber crimes, provisions under law and scope of various cyber laws. Legal amendments in the Evidence Act concerning cyber crimes.

Text Books:

1. E-Business and E-Commerce Management: Strategy, Implementation and Practice By Dave Chaffey

BMIT 713   Business Applications for Extended Enterprises   Credits 4 (2+2+0)

Course Objectives:

This course aims to conceptualise students to acquire knowledge and skills necessary in Agnostic Data Representation and Processing in XML Service Oriented Architecture (SOA) and Enterprise Service Bus (ESB), and Message Oriented Middleware (MOM)

Unit-1 Introduction, Course Motivation and Dynamics.

Fundamental Problems in Large-Scale Application Integration. Overall Theme: Service Oriented Architecture and Agnostic Data Representation and Processing in XML and XSLT

Unit-2 Service Oriented Architecture (SOA) and Enterprise Service Bus (ESB) – Part ½

Service Oriented Architecture (SOA) and Enterprise Service Bus (ESB) – Part 2/2, 2nd Generation Web Services (Messaging, Security, Reliability, Transactions, Processes, Metadata), Overall Theme: Security in Large-Scale Enterprise Systems , Attack Patterns in Large Organizations and Design Principles and Evaluation of Security in Large-Scale Systems

Unit-3 Oriented Architecture" Overall Theme: Middleware

Distributed Transactions, Two-Phase Commit, Business Activities, and relaxing Isolation Message Oriented Middleware (MOM) Overall Theme: Integrating with Business Partners

Unit-4 Integration with Legacy Systems: Challenges and Approaches

Integration with External Partners: Standards RosettaNet, ebXML, UCCNet, Overall Theme: Reliability and Fault-Tolerance ,Deployment of Large-Scale Systems in the Real World.

COMP 841   **Software Engineering**   **Credit 3 (2+1+0)**

Course Objectives:

This course aims to conceptualise students to acquire knowledge and skills necessary in software engineering, software requirement specification, coding and software Project Management

Unit-I

Introduction: Introduction to software engineering, Importance of software, The evolving role of software, Software Characteristics, Software Components, Software applications, Software Crisis, Software engineering problems, Software Development Life Cycle, Software Process.

Unit-II

Software Requirement Specification: Analysis Principles, Water Fall Model, The Incremental Model, Prototyping, Spiral Model, Role of management in software development, Role of matrices and Measurement, Problem Analysis, Requirement specification, Monitoring and Control. Software-Design: Design principles, problem partitioning, abstraction, top down and bottom up-design, Structured approach, functional versus object oriented approach, design specifications and verification, Monitoring and control, Cohesiveness, coupling, Fourth generation techniques, Functional independence, Software Architecture, Transaction and Transform Mapping, Component – level Design, Fourth Generation Techniques

Unit-III

Coding: Top-Down and Bottom –Up programming, structured programming, information hiding, programming style and internal documentation. Testing: Testing principles, Levels of testing, functional testing, structural testing, test plane, test case specification, reliability assessment, software testing strategies, Verification & validation, Unit testing, Integration Testing, Alpha & Beta testing, system testing and debugging.

Unit-IV

Software Project Management: The Management spectrum- (The people, the product, the process, the project), cost estimation, project scheduling, staffing, software configuration management, Structured Vs. Unstructured maintenance, quality assurance, project monitoring, risk management.

Unit-V

Software Reliability & Quality Assurance: Reliability issues, Reliability metrics, Reliability growth modeling, Software quality, ISO 9000 certification for software industry, SEI capability maturity model, comparison between ISO & SEI CMM. CASE (Computer Aided Software Engineering): CASE and its Scope, CASE support in software life cycle, documentation, project management, internal interface, Reverse Software Engineering, Architecture of CASE environment

BAM- 780   **Seminar I***   **Credit 1 (0+1+0)**

*Summer Training Project seminar, Winter Project/ Dissertation: 4weeks

MBA (IT) 4th Semester

COMP-807 Business Intelligence (Data Mining & Data Warehousing) Credit: 4(2+1+2)

Course Objectives:

This course aims to guide individuals to acquire knowledge and skills necessary to intellectualise the data warehousing, data mining, data processing, classification and prediction and understanding business Intelligence application.

UNIT-1
Introduction of Data Warehousing: Introduction, Characteristics of Data Warehousing. Data Mart, Types of Data Mart, Types of Schemes- Star, Snowflake, Galaxy Fact and Dimension Tables, Online Analytical Processing, OLAP Operations, From OLAP to Data Mining
Introduction to Data Mining: Motivation for Data Mining, Data Mining Definitions and Functionalities, Classification of DM Systems, DM Task, Primitives, Integration of DM System with a Database or a Data Warehousing, Major Issues in DM
UNIT-2
Data Possessing: Need, Descriptive Data Summarization, Data Cleaning: Missing Values, Noisy Data, Data Integration and Transformation, Data Reduction- Data Cube, Data Cube Aggregation, Dimensionality Reduction, Data Compression, Numerosity Reduction, Data Discretisation and Concept Hierarchy Generation for Numerical and Categorical Data
Mining Frequent Patterns, Associations and Correlations : Market Basket Analysis, Frequent Item Sets, Close Item Sets and Association rules, Frequent Pattern Mining, Generating Association Rules From Frequent Item Sets, From Association Mining Correlation Analysis, Constrains- Based Association Mining
UNIT 3
Classification and Prediction: Overview, Issues regarding and classification and predictions:
  * Classification method
  * Prediction
Accuracy and errors measures: Evaluating accuracy of the classifier or predictor
Concept related to cluster analysis: Concepts related to mining stream & sequence Data, Concept related to Spatial Data and Text Mining, Web Mining, Content Mining, Web Structure Mining, Web Usage mining, Automatic Classification of Web Documents.
UNIT-4
Data Mining for Business, Intelligence Applications, Data mining for business, Applications like Balanced Scorecard, Fraud Detection, Clickstream Mining, Market Segmentation, Retail industry, telecommunications industry, banking & finance and CRM etc.
UNIT-5
Case study, Study any one of the business intelligence project like Balanced Scorecard, Fraud detection, Market Segmentation etc and present a report of 10 to 15 pages.

Text Book:
  1. Han and Kamber " Data Mining Concepts and Techniques", Morgan Kaufmann 2nd Edition

  2. P.N. Tan, M. Steinbach, Vipin Kumar, "Introduction to Data Mining" Pearson Education

BMIT 716   Business Simulation Using System Dynamic   Credit: 4 (4-0-0)

Course Objectives:

This course aims to guide individuals to acquire knowledge and skills necessary to conceptualize dynamic policy problems, develop appropriate simulation models, and use models for decision making and policy analysis. The core of this course is to understand the significance and usefulness of information feedback and circular causality in comprehending the behavior of social systems.

UNIT I
Introduction to system dynamics, Systems thinking, feedback structure and policy simulation
Tools of system dynamics modeling: diagrams, equations, and software, Model construction and formulation in Model construction and formulation in Model construction and formulation in Generic structures: stocks & flows

UNIT II
Dynamics of stocks & flows , Dynamics of stocks & flows II (epidemic model), Technical tools, Delays and Oscillations (market growth model), Conceptualization (fish banks model)

UNIT III
Oscillations (commodities model), Generic processes (co-flow & aging chain) and system archetypes, communicating structure: cognitive maps and policy structures

Textbook –
   1. Sterman, John, D., 2000, *Business Dynamics: Systems Thinking and Modeling for a Complex World*. Irwin McGraw-Hill.

Readings -
   1. Kim, D. H. (1992). *System Archetypes*. Waltham, MA: Pegasus Communications. Meadows, D. H. (1982). Whole earth models and systems. *The CoEvolution Quarterl*y, summer issue.
   2. Morecroft, J. D. W. (1984). Strategy Support Models. *Strategic Management Journal*, 5(3), 215-229.
   3. Richmond, B. (1993). System thinking: critical thinking skills for the 1990s and beyond.*System Dynamics Review*, 9(2), 113-133.

BMIT 714   Strategic Management & Information System Strategy Credits 4 (4+0+0)

UNIT-1   Introduction: What is IT Strategy?
UNIT-2   The "big picture"
  * Overview of Business Capability
  * Business Process needs
  * Information Technology Capability
  * Building an IT Capability
UNIT-3   IT Strategy Overview: 7 steps to IT Alignment
  * Business Drivers and Imperatives
  * Technology implication
  * Creating the "as-is" view
  * Envisioning the "to-be" capability
  * Identifying the gaps
  * Prioritizing the alternatives
  * Devising a migration plan
UNIT-4 Business Drivers and Imperatives
  * Business driver
  * Understanding their imperatives
  * Assessing their impact
  * Case studies
UNIT-5 Building the "as-is" capability view
  * Process
  * Technology
  * Organization
  * Metrics
UNIT-6 Envisioning the "to-be" capability
  * Process
  * Technology
  * Organization
  * Metrics
UNIT-7 Identifying the gaps
UNIT-8 Prioritizing the Alternatives
  * Framework
  * Business value
  * Cost
  * Risk
  * Prioritization
UNIT -9 Devising a migration plan
  * Discussion of migration approaches
  * Selection criteria and rationale
  * Planning for migration
UNIT-10 Case Studies in Practical Applications
Summary and Next Steps

COMP- 808   **Digital Infrastructure & ERP**   **Credits: 4 (3+0+2)**
Course Objectives:

This course aims to guide individuals to acquire knowledge and skills necessary to conceptualize process of ERP, Business Process Mapping for ERP Module Design and ERP and Related Technologies.

UNIT-1
Introduction to ERP: Evolution of ERP; what is ERP? Reasons for the Growth of ERP; Scenario and Justification of ERP in India; Evaluation of ERP; Various Modules of ERP;
Advantage of ERP.

UNIT-2
An Overview of Enterprise: Integrated Management Information; Business Modeling; ERP for Small Business; ERP for Make to Order Companies; Business Process Mapping for ERP Module Design; Hardware Environment and its Selection for ERP Implementation.

UNIT-3
ERP and Related Technologies: ERP and Related Technologies; Business Process Reengineering (BPR); Management Information System (MIS); Executive Information System (EIS); Decision support System(DSS); Supply Chain Management (SCM).

UNIT-4
ERP System: ERP system: Introduction; Finance, Plant Maintenance, Quality Management, Materials Management.

UNIT-5
ERP Market: ERP Market: Introduction, SAP AG, Baan Company, Oracle Corporation, People Soft, JD Edwards World Solutions Company, System Software Associates, Inc. (SSA); QAD; A Comparative Assessment and Selection of ERP Packages and Modules.

UNIT- 6
ERP Implementation Lifecycle: ERP Implementation Lifecycle: Issues in Implementing ERP Packages; Pre-evaluation Screening; Package Evaluation; Project Planning Phase; Gap Analysis; Reengineering; Configuration; implementation; Team Training; Testing; Going Live; EndUser Training; Post Implementation (Maintenance Mode).

UNIT-7
Selection of ERP vendors: Vendors; Consultants and Users; In-House Implementation -Pros and Cons; Vendors; Consultants; End User.

UNIT-8
Future Directions in ERP: Future Directions in ERP; New Markets; New Channels; Faster Implementation Methodologies; Business Modules and BAPIs; Convergence on Windows NT; Application Platform;New Business Segments; More Features; Web Enabling; Market Snapshot.

UNIT-9

Other Related Technologies of SCM: Relation to ERP; E-Procurement; E-Logistics; Internet Auctions; E-markets; Electronic Business Process Optimization; Business Objects in SCM; E commerce.

Text Books:

1.Manufacturing Resource Planning (MRP II) with Introduction to ERP; SCM; an CRM by Khalid Sheikh, Publisher: McGraw-Hill

2.The Impact of Enterprise Systems on Corporate Performance: A study of ERP, SCM, and CRM System Implementations [An article from: Journal of Operations Management] by K.B. fendricks; V.R. Singhal; and J.K. Stratman, Publisher:Elsevier

3.ERP and Supply Chain Management by Christian N. Madu, Publisher: CHI

4.Implementing SAP ERP Sales & Distribution by Glynn C. Williams, Publisher McGraw-Hill

BMIT 715   **Information Risk Management**   **Credits: 4 (4+0+0)**

- Concepts & Importance of information risk management
- The information risk management environment
- Stages of information risk management
- Action and implementation
- 5 Information classification schemes

BAM 883	Seminar II	1(0+1+0)
BAM 820	Project Report	10(0+0+20)
BAM 884	Comprehensive Viva Voce	1(0+1+0)