

**NOIDA INSTITUTE OF ENGG. & TECHNOLOGY, GREATER NOIDA, GAUTAM BUDDH NAGAR  
(AN AUTONOMOUS INSTITUTE)**



**Affiliated to**

**DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY UTTAR PRADESH, LUCKNOW**



**Evaluation Scheme & Syllabus**

**For**

**Masters of Business Administration**

**MBA**

**Second Year**

**(Effective from the Session: 2023-24)**

**NOIDA INSTITUTE OF ENGG. & TECHNOLOGY, GREATER NOIDA, GAUTAM BUDDH NAGAR**  
(AN AUTONOMOUS INSTITUTE)

**Masters of Business Administration**

**MBA**

**EVALUATION SCHEME**

**SEMESTER-III**

S. No	Subject Code	Subject Name	Periods			Evaluation Scheme				End Semester		Total	Credit
			L	T	P	CT	TA	Total	PS	TE	PE		
1	AMBA0301	Strategic Management	3	0	0	30	20	50	0	100	0	150	3
2	AMBA0302	Corporate Governance, Values & Ethics	3	0	0	30	20	50	0	100	0	150	3
3		Specialization Group -1 Elective -1	3	1	0	30	20	50	0	100	0	150	4
4		Specialization Group -1 Elective- 2	3	1	0	30	20	50	0	100	0	150	4
5		Specialization Group -1 Elective- 3	3	1	0	30	20	50	0	100	0	150	4
6		Specialization Group -2 Elective- 1	3	1	0	30	20	50	0	100	0	150	4
7		Specialization Group -2 Elective -2	3	1	0	30	20	50	0	100	0	150	4
8	AMBA0359	Summer Internship Project Report	0	0	4				50		100	150	2
<b>GRAND TOTAL</b>											<b>1200</b>	<b>28</b>	

Abbreviation Used:-

L: Lecture, T: Tutorial, P: Practical, CT: Class Test, TA: Teacher Assessment, PS: Practical Sessional, TE: Theory End Semester Exam., PE: Practical End Semester Exam.

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**MBA III SEMESTER**

<b>S.No</b>	<b>Subject Code</b>	<b>Semester</b>	<b>Subject name</b>
<b>Core Subjects III Semester</b>			
1	AMBA0301	III SEM	Strategic Management
2	AMBA0302	III SEM	Corporate Governance, Values and Ethics
<b>PROJECT</b>			
1	AMBA0359	III SEM	Summer Internship Project
<b>ELECTIVE SUBJECTS</b>			
<b>Finance Specialization</b>			
1	AMBAFM0311	III SEM	Security Analysis and Portfolio Management
2	AMBAFM0312	III SEM	Corporate Tax Planning
3	AMBAFM0313	III SEM	Indian Financial Market and Services
<b>HR Specialization</b>			
1	AMBAHR0311	III SEM	HR Analytics
2	AMBAHR0312	III SEM	Employee Relations and Labor Law
3	AMBAHR0313	III SEM	Performance and Reward Management
<b>Marketing Specialization</b>			
1	AMBAMK0311	III SEM	Digital and Social Media Marketing
2	AMBAMK0312	III SEM	Product and Brand Management
3	AMBAMK0313	III SEM	Consumer Behavior and Advertising Management
<b>BI (Business Intelligence) Specialization</b>			
1	AMBABI0311	III SEM	ERP Modules
2	AMBABI0312	III SEM	Machine Learning & Artificial Intelligence
3	AMBABI0313	III SEM	Cloud and Big Data
<b>Logistics and Supply Chain Management Specialisation</b>			
1	AMBALS0312	III SEM	Supply chain Planning and Demand Forecasting
2	AMBALS0311	III SEM	Procurement and Vendor Development
3	AMBALS0313	III SEM	Warehouse and Distribution Management
<b>Business Analytics Specialisation</b>			
1	AMBABA0312	III SEM	Introduction to Data Science
2	AMBABA0311	III SEM	Business Intelligence and Data Warehousing
3	AMBABA0313	III SEM	Predictive Analytics

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**EVALUATION SCHEME**

**SEMESTER-IV**

S. No	Subject Code	Subject Name	Periods			Evaluation Scheme				End Semester		Total	Credit
			L	T	P	CT	TA	Total	PS	TE	PE		
1	AMBA0401	Project Management	3	0	0	30	20	50	0	100	0	150	3
2		Specialization Group -1 Elective -4	3	1	0	30	20	50	0	100	0	150	4
3		Specialization Group -1 Elective -5	3	1	0	30	20	50	0	100	0	150	4
4		Specialization Group -1 Elective -6	3	1	0	30	20	50	0	100	0	150	4
5		Specialization Group -2 Elective- 3	3	1	0	30	20	50	0	100	0	150	4
6		Specialization Group -2 Elective- 4	3	1	0	30	20	50	0	100	0	150	4
7	AMBA0459	Research Project Report*	0	0	6				100		100	200	3
<b>GRAND TOTAL</b>												<b>1100</b>	<b>26</b>

**\* Satisfactory completion of minimum 1 'Research Publication' in a listed Journal is mandatory for award of degree.**

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**MBA IV SEMESTER**

<b>S.No</b>	<b>Subject Code</b>	<b>Semester</b>	<b>Subject name</b>
<b>Core Subjects IV Semester</b>			
1	AMBA0401	IV SEM	Project Management
<b>PROJECT</b>			
1	AMBA0459	IV SEM	Research Project Report
<b>ELECTIVE SUBJECTS</b>			
<b>Finance Specialization</b>			
1	AMBAFM0411	IV SEM	Financial Modeling
2	AMBAFM0412	IV SEM	Working Capital Management
3	AMBAFM0413	IV SEM	Financial Derivatives & Risk Management
<b>HR Specialization</b>			
1	AMBAHR0411	IV SEM	Talent Management
2	AMBAHR0412	IV SEM	Strategic Human Resource Management
3	AMBAHR0413	IV SEM	Diversity of Work Force (IHRM)
<b>Marketing Specialization</b>			
1	AMBAMK0411	IV SEM	Sales & Retail Management
2	AMBAMK0412	IV SEM	Marketing Analytics
3	AMBAMK0413	IV SEM	Marketing of Services
<b>BI (Business Intelligence) Specialization</b>			
1	AMBABI0411	IV SEM	Cyber Security
2	AMBABI0412	IV SEM	Data Base Technology
3	AMBABI0413	IV SEM	System Analysis & Design
<b>Logistics and Supply Chain Management Specialisation</b>			
1	AMBALS0412	IV SEM	Information Systems in Logistics and Supply Chain
2	AMBALS0411	IV SEM	Global Business Management for Logistics and Supply Chain
3	AMBALS0413	IV SEM	Supply Chain Analytics
<b>Business Analytics Specialisation</b>			
1	AMBABA0412	IV SEM	Machine Learning and Artificial Intelligence
2	AMBABA0411	IV SEM	Data Visualisation
3	AMBABA0413	IV SEM	Social Media Analytics

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBA0301</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Strategic Management</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 36 Hours</b>	
1	A clear understanding of the key concepts and principles of strategic management.				
2	A set of useful analytical skills, tools and techniques for analyzing a company strategically.				
3	To provide a basic understanding of the nature and dynamics of the strategy formulation and implementation processes.				
4	To encourage students to think critically and strategically.				
5	The ability to identify strategic issues and design appropriate courses of action.				
<b>Pre-requisites: Business Environment</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Business Policy and Strategies</b>				<b>6 Hours</b>
Introduction, Fundamentals of Strategy, Conceptual Evolution of Strategy, Scope and Importance of Strategies, Purpose of Business, Difference between Goals and Objectives of Business, Strategic Intent through Vision and Mission Statements, Core Competencies of Business, levels of strategy <b>Case study related to Goals and objectives of business, Core Competencies</b>					
<b>UNIT-II</b>	<b>Environmental Scanning</b>				<b>8 Hours</b>
<b>Analyzing Company's External Environment:</b> Environmental appraisal Scenario planning - Preparing an Environmental Threat and Opportunity Profile (ETOP),PESTEL analysis, EFE Matrix <b>Analyzing Industry Environment:</b> Industry Analysis - Porter's Five Forces Model of competition, Entry & Exit Barriers, Strategic Group analysis. <b>Analyzing Company's Internal Environment:</b> Resource based view of a firm, meaning, types & sources of competitive advantage, analyzing Company's Resources and Competitive Position, VRIO Framework, competitive advantage, competitive parity & competitive disadvantage, Core Competence, characteristics of core competencies, Distinctive competitiveness, Benchmarking as a method of comparative analysis. <b>Case Study on Environmental scanning</b>					
<b>UNIT-III</b>	<b>Strategy Formulation and Strategic Analysis</b>				<b>8 Hours</b>
<b>Generic Competitive Strategies:</b> Meaning of generic competitive strategies, Low cost, Differentiation, Focus – when to use which strategy. <b>Grand Strategies:</b> Stability, Growth (Diversification Strategies, Vertical Integration Strategies, Mergers, Acquisition & Takeover Strategies, Strategic Alliances), Retrenchment– Turnaround, Divestment, Liquidation, Outsourcing Strategies. Structural analysis of competitive environment, Strategic analysis and choice-Criteria for evaluating strategic alternatives, Tools of strategic analysis, strategic choice-BCG Matrix, Ansoff Grid, GE 9 Cell grid. <b>Case Study on Strategy formulation</b>					
<b>UNIT-IV</b>	<b>Strategy Implementation, Evaluation and control</b>				<b>8 Hours</b>

Components of a strategic plan, barriers to implementation of strategy, Mintzberg's 5 Ps, 7 S framework, Leadership and corporate culture, functional plans to implement strategy, Ethics and social responsibility.

Strategic evaluation and control, Strategic control and operational control, techniques of strategic evaluation.

**Case Study on strategy implementation**

<b>UNIT-V</b>	<b>Contemporary issues</b>	<b>6 Hours</b>
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Balance score card, Porter five forces model, Red ocean and blue ocean strategy. Strategies for situation like competing in emerging industries, maturing or declining industries, fragmented industries.

**Case Study**

**Course outcome: At the end of course, the student will be able to:**

CO 1	Formulate organizational vision, mission, goals and values	Apply (K3)
CO 2	Develop strategies and action plans to achieve an organization vision, mission and goals	Create (K6)
CO 3	Develop powers of managerial judgment, how to assess business risk and improve ability to make sound decisions and achieve effective outcomes	Create (K6)
CO 4	Evaluate and revise programs and procedures in order to achieve org goals	Evaluate (K5)
CO 5	Consider the ethical dimension of the strategic mgt process	Analyze(K4)

**Text books**

1. Strategic Management and Business Policy by Azhar Kazmi, Tata McGraw-Hill
2. Wheelen, L. Thomas and Hunger, David J.; Strategic Management and Business Policy, Crafting and Executing Strategy; Pearson Education, Thirteenth edition.

**Reference Books**

1. Business Policy and Strategic Management by P. Subba Rao
2. Crafting and Executing Strategy- The Quest for Competitive Advantage by Thompson, Strickland, Gamble & Jain, Tata McGraw-Hill
3. Business Strategy formulation by Anthony Ulwick

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBA0302</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Corporate Governance, Values &amp; Ethics</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 36 Hours</b>	
1	Introduce the concept and importance of corporate governance in business				
2	Make students aware of corporate governance frame work in India.				
3	Understanding of various aspects and dimensions of ethics in management				
4	Discuss the ethical values and that drive the modern businesses				
5	Develop the understanding of modern challenges and issues in corporate Governance.				
<b>Pre-requisites:</b> Principles & Practice of Management, Organizational Behaviour					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Corporate Governance</b>				<b>Hours: 7</b>
Meaning, Definition, Nature, Issues, need of corporate governance code, Code of Corporate Practices, Corporate Social Responsibility, Corporate Social Reporting, Corporate Governance and the Role of Board (BOD), Corporate Governance System Worldwide, Corporate Disclosure and Investor Protection in India.					
<b>UNIT-II</b>	<b>Corporate Governance Framework in India</b>				<b>Hours: 8</b>
Corporate Boards and Its Powers, Responsibilities and Disqualifications; Board Committees and their Functions- Remuneration Committee, Nomination Committee, Compliance Committee, Shareholders Grievance Committee, Investors Relation Committee, Investment Committee, Risk Management Committee, and Audit Committee; Regulatory Framework of Corporate Governance in India; SEBI Guidelines and Clause 49; Reforms in The Companies Act, 2013; Challenges in Corporate Governance					
<b>UNIT-III</b>	<b>Values in Modern Business</b>				<b>Hours: 7</b>
Values – Concepts, Types and Formation of Values, Values of Indian Managers; Managerial Excellence through Human Values; Spiritual Values. Modern Business Ethics and Dilemmas, Conflict between personal values and organizational goals.					
<b>UNIT-IV</b>	<b>Business Ethics</b>				<b>Hours: 7</b>
Meaning, Definition, Nature, Importance. Ethical Dilemma – Ethical Decision Making, Ethical Reasoning, Ethical issues, Ethics Management – Key roles and responsibilities, Benefits of Managing Ethics in Work Place, Code of ethics, Guidelines for developing code of ethics. Historical Perspective of Ethics – Excerpts from scriptures, Socialization.					
<b>UNIT-V</b>	<b>Ethics in Organization</b>				<b>Hours: 7</b>
Institutionalizing of Ethics, Traditional view, Contractual theory, Stake-holders’ theory, The Regulatory and voluntary actions. Ethics and HRM, Ethics and Marketing, Ethics in Finance and Accounting, Ethical implications of Technology. Ethics and Information Technology					
<b>Course outcome: At the end of course, the student will be able to</b>					
CO 1	Have insights into various concepts & cases related to Corporate Governance.				Understand ( K 2)



CO 2	Gain a deeper understanding of the about the Corporate Governance framework.	Apply ( K 3)
CO 3	Develop the ability to practice various aspects, factors related value in business.	Analyzing ( K 4)
CO 4	Work and discharge responsibilities in an ethical way in the organization	Applying ( K 3)
CO 5	Understand modern practices of Corporate Governance in various areas of business.	Understand ( K 2)
<b>Text books</b>		
<ol style="list-style-type: none"> <li>1. Fernando A C – Business Ethics &amp; Corporate Governance, 2e, Pearson</li> <li>2. Kumar T N Satheesh- Corporate Governance, Oxford University Press</li> <li>3. Mandal S K – Ethics in business and corporate governance, 2e, McGraw-Hill</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Hartman Laura P &amp; Chatterjee Abha - Business Ethics, Tata McGraw Hill</li> <li>2. Mohapatra, Sreejesh- Case Studies in Business Ethics &amp; Corporate Governance, 1e, Pearson</li> </ol>		

## MBA SECOND YEAR

<b>Course Code</b>	<b>AMBA0359</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Summer Internship Project</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>
<b>Course objective: Objective of this project is to:</b>				<b>Contact Hours: 10</b>	
1	Assess interest and abilities in their field of Study.				
2	Develop work habits and attitudes necessary for job success.				
3	Demonstrate an understanding of professional and ethical practice.				
4	Develop analytical skills including the ability to understand information and interpret data.				
5	Develop interpersonal skills which will enable them to build professional relationships, work within a team structure and to manage conflict in the workplace.				

### **Guidelines:**

1. At the end of second semester examination, it is mandatory for every student of MBA to undergo on-the-job practical training in any manufacturing, service or financial organization. The training will be of 6 to 8 weeks duration. The student is expected to undergo a compulsory training for the mentioned period.
2. During the training, the student is expected to learn about the organization and analyze and suggest solutions of a live problem. The objective is to equip the student with the knowledge of actual functioning of the organization and problems faced by them for exploring feasible suggestions.
3. During the course of training, the organization (where the student is undergoing training) will assign a problem/project to the student.
4. The student, after the completion of training will submit a report to the College/Institute which will form part of third semester examination.
5. The report (based on training/the problem/project studied) prepared by the student will be known as Summer Internship Project. The report should ordinarily be based on primary data. It should reflect in depth study of micro problem, ordinarily assigned by the organization where student undergoes training. Relevant tables and bibliography should support it. One comprehensive chapter must be included about the organization where the student has undergone training. This should deal with brief history of the organization, its structure, performance products/services and problem faced. This chapter will form part 1 of the report. Part 2 of the report will contain the study of micro research problem. The average size of report ordinarily will be of minimum 40-60 pages in standard font size (12) and double spacing. Two neatly typed and soft bound (paperback) copies of the report will be submitted to the College/Institute. The report will be typed in A-4 size paper.
6. The report will have two certificates. One by the Head of the Department and the other by the Reporting Officer of the organization where the student has undergone training. These two certificates should be attached in the beginning of the report.
7. The Summer Internship Project Report will carry 100 marks and will be evaluated by two examiners (external and internal). The evaluation will consist of (1) Project Report evaluation (2) Project Presentation and Viva. The Project Report evaluation will comprise of 50 marks and would be evaluated by internal project guide. The Presentation and Viva Voce would comprise of 100 marks and would be evaluated by two examiners (1 external and 1 internal). Only such person will evaluate the project report who has minimum three years of experience of teaching MBA classes in a College/University. Experience of teaching MBA

classes as guest faculty shall not be counted.

8. It is mandatory that the student will make presentation in the presence of teachers and students. The student is expected to answer to the queries and questions raised in such a meeting.

9. The student shall prepare the Summer Internship Project Report as per the format given in the Summer Training Manual as prescribed by the Institute.

10. Students must publish their research paper in national / international journal or can present their research paper in national / international conference or conference proceedings.

**Project Report Evaluation: (Internal)**

Relevance of Objectives with Topic (10)	Relevance of Research Methodology (20)	Interpretation and Analysis (20)	Total (50)
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**Presentation and Viva Voce Presentation: (External)**

Relevance of Objectives with Topic (10)	Relevance of Research Methodology (20)	Interpretation and Analysis (30)	Presentation and Communication Skills (30)	Query Handling (10)	Total (100)
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**Course outcome: At the end of course, the student will be able to:**

CO1	Identify and analyze business problem in an organization through research.	Understanding (K2)
CO2	Develop the ability to identify the various functions of the organization.	Analyze (K4)
CO3	Identify causes and effects of the problem.	Evaluating (K5)
CO4	Develop ability to interpret data and draw conclusions	Creating (K6)
CO5	Develop Multi-Disciplinary Approach for identifying and solving business problems	Creating (K6)

## MBA SECOND YEAR

<b>Course Code</b>	<b>AMBAFM0311</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Security Analysis and Portfolio Management</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 hours</b>	
1	Introduce students to stock, stock market and approaches to investing in the stock market and building stock portfolios.				
2	Understanding of investment theory will be stressed and tied in with discussion of applicable techniques such as portfolio selection.				
3	Equip students with techniques that can be applied in different business situations regarding active portfolio management.				
4	Expose the students to the concepts and approaches applicable in the field of security analysis and portfolio management.				
5	Encourage students to apply stock and debt valuation models in portfolio management.				
<b>Pre-requisites:</b> Required Basic Knowledge of capital market and time value of money					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>		<b>Investment Environment</b>			<b>Hours:8</b>
The Investment Environment - Meaning and objective of investment, investment vs. gambling and speculation, investment alternatives, investment process and Type of investors .Overview of Capital Market: Market of securities, Stock Exchange and New Issue Markets - their nature, structure, functioning and limitations; Securities trading - Equity and debentures/ bonds ; Types of orders, margin trading, Participants in the financial market ,clearing and settlement procedures. Regularity systems for equity markets. Concept of return and risk.					
<b>UNIT-II</b>		<b>Capital market Analysis</b>			<b>Hours:8</b>
Fundamental analysis: economic analysis, industry analysis and company analysis. Technical analysis: DOW Theory, Support and Resistance level, Type of charts & its interpretations, moving averages and market indicators, Trend line, Gap Wave Theory, Relative strength. Efficient market theory: weak form hypothesis, semi-strong form hypothesis and strong form hypothesis.					
<b>UNIT-III</b>		<b>Bond and Equity Valuation</b>			<b>Hours:10</b>
Valuation of Equity Discounted Cash-flow techniques: Balance sheet valuation, Dividend discount models, Intrinsic value and market price, earnings multiplier approach, P/E ratio, Price/Book value, Price/sales ratio. CAPM (Capital Asset Pricing Model) and Arbitrage Pricing Theory. Case Studies Valuation of Debentures/Bonds : nature of bonds, valuation, Bond theorem, Term structure of interest rates and concept of duration					
<b>UNIT-IV</b>		<b>Portfolio Theory</b>			<b>Hours:7</b>
Risk & Return: Concept of Risk, Component & Measurement of risk, covariance, and correlation risk. Portfolio risk and return, Beta as a measure of risk, calculation of beta, Selection of Portfolio: Markowitz's Theory, Single Index Model, Case Studies.					
<b>UNIT-V</b>		<b>Active Portfolio Management</b>			<b>Hours:7</b>
Portfolio Management and Performance Evaluation: Performance Evaluation of existing portfolio, Sharpe, Treynor and Jensen measures; Finding alternatives and revision of portfolio; Portfolio Management and Mutual Fund Industry					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO 1	Understand about various investment avenues.	(Understand) K2
CO 2	Understand the valuation of assets and manage investment portfolio.	(Understand) K2
CO 3	Measure risk of a stock or a portfolio position.	(Understand) K2
CO 4	Analyze and evaluate portfolio performance.	(Analyze) K4
CO 5	Understand and create various investment strategies on the basis of various market conditions.	(Create) K6

### **Text books**

- 1) Rustagi R.P–Investment Analysis and Portfolio Management (Sultan Chand, 2nd Ed.)
- 2) Chandra P - Investment Analysis and Portfolio Management (Tata McGraw Hill, 3rd Ed)
- 3) Kevin S. -Security Analysis and Portfolio Management (PHI, 2<sup>nd</sup> Ed.)

### **Reference Books**

- 1) Ranganatham - Security Analysis and Portfolio Management (Pearson Education, 2nd Ed.)
- 2) William F. Sharpe, Gordon J.Alexander and Jeffery V.Bailey: Investments, (Prentice Hall, 6th Ed).
- 3) Donald E. Fischer and Ronald J.Jordan: Security Analysis and Portfolio Management, (Pearson Education, 6th Ed)

<b>MBA SECOND YEAR</b>			
<b>Course Code</b>	<b>AMBAFM0312</b>	<b>L T P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Corporate Tax Planning</b>	<b>3 1 0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>		<b>Duration: 40 Hours</b>	
1	Familiarize the participants with the principles, problems and structure of different types of taxes in Indian economy.		
2	Acquire the complete knowledge of basic concepts of income tax, understand the provisions of agricultural income and calculate Residential status of a person.		
3	Compute the total income under the various heads of income		
4	Get familiarize with the adjustments to be made in the taxable income.		
5	A broad understanding about the relevance of GST in taxation policy of the economy		
<b>Pre-requisites:</b> Required basic knowledge of taxation			
<b>Course Contents / Syllabus</b>			
<b>UNIT-I</b>	<b>Introduction to Direct Taxation</b>	<b>Hours: 6</b>	
Introduction: Definition, Cannons of Taxation Person, Assesses, Income, Previous Year, Assessment Year, Income Tax, Important Dates and Forms. Residential Status & Tax Incidence. Individual Income Exempted from Tax. Treatment of Agricultural income			
<b>UNIT-II</b>	<b>Heads of Income</b>	<b>Hours:10</b>	
Five Heads of Income – Income from Salary includes allowances and Perquisites, Income from House Property, Profits & Gains from Business or Profession, Capital Gains – Short term capital gains (STCG) & Long term capital gains, Income from Other sources			
<b>UNIT-III</b>	<b>Aggregation of income and adjustments</b>	<b>Hours: 8</b>	
Clubbing of incomes, Calculation of Taxable Income ,Tax Calculation including Surcharge and Marginal relief, Deduction, Rebate, Relief, Set Off & Carry Forward of Losses – Principles, Meaning, Inter-head adjustment, Inter – source adjustment and Intra – head Set Off,			
<b>UNIT-IV</b>	<b>Tax Planning &amp; Management</b>	<b>Hours:8</b>	
Tax Planning & Management, Tax Avoidance, Planning, & Evasion, Income Tax Authorities- Their appointment- Jurisdiction-Powers and functions- Provisions relating to collection and recovery of tax- Refund of tax, Offences, penalties and Prosecutions, Appeals and Revisions, Advance Tax, TDS, Advance Rulings, Avoidance of Double Taxation Agreements.			
<b>UNIT-V</b>	<b>Introduction to Indirect Taxation</b>	<b>Hours:8</b>	
GST Concepts –Advantages and Limitations of VAT – GST as the preferred Tax Structure. Model of GST. Need for Tax Reforms, GST Principles – Single GST, Dual GST; Transactions covered under GST; Impact of GST. Registration and Filing: – Rates of Tax – Rates in Foreign Countries – In India; Assessment and Administration of GST.			
<b>Course outcome: At the end of course, the student will be able to:</b>			
CO 1	Understand about various Tax provisions and Tax planning	(Understand) K2	
CO 2	Calculate taxable income by taking into consideration five heads of income	(Apply) K3	
CO 3	Understand clubbing and aggregation of income and apply Inter-source and Inter-head adjustment	(Apply) K3	

CO 4	Have knowledge about various Tax Dates, Rates and Forms	(Apply) K3
CO 5	Understand how GST can be calculated & managed.	(Understand) K2

### **Text books**

- 1) Dr. Vinod K. Singhanian & Dr. Monica Singhanian Students Guide to Income Tax (Taxmann Publication, Latest Edition according to assessment year)
- 2) Girish Ahuja & Ravi Gupta Direct Tax Laws & Practice (Bharat Law House, Latest Edition)
- 3) Dr.B.K. Agarwal& Dr. Rajeev Agarwal Tax Planning and Management(Nirupam Publication, Latest Edition according to assessment year)

### **Reference Books**

- 1) Dr.Vinod K. Singhanian & Dr. Kapil Singhanian Students Guide to Income Tax (Taxmann Publication, Latest Edition)
- 2) Parthasarathy Corporate Governance: Principles, Mechanisms & Practice (Wiley, Latest Edition )
- 3) H. P. Ranina Corporate Taxation (Orient Law House, Latest Edition)
- 4) Income Tax Reports, Company Law institute of India PvtLtd(Chennai Latest Edition)
- 5) Taxman, Taxman Allied SerivesPvtLtd.(New DelhiLatest Edition)

## MBA SECOND YEAR

<b>Course Code</b>	<b>AMBAFM0313</b>	<b>L T P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Indian Financial Market &amp; Services</b>	<b>3 1 0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>		<b>Duration: 40 Hours</b>	
1	Impart knowledge of the Financial System of India, the role of Financial Institutions, Financial markets and Financial Instruments.		
2	Aware the students' with the mechanism of Commercial Banking, its Operations, Instruments Regulations etc.		
3	Help the students in acquiring analytical skills in the Money and capital Market in the context of raising medium and long term Funds		
4	Aware the students with the Microfinance as a growing source of Financial mechanism		
5	Develop an appreciation among the students for Insurance products.		
<b>Pre-requisites:</b> Required Basic Knowledge for Indian Financial Market & Services.			
<b>Course Contents / Syllabus</b>			
<b>UNIT-I</b>	<b>Structure of Indian financial system</b>	<b>Hours:6</b>	
Structure of Indian financial system: An overview. Theories of the Impact of financial development and savings; Prior saving theory, Credit creation Theory, Theory of forced savings, Financial regulation theory, Financial liberation Theory.			
<b>UNIT-II</b>	<b>RBI &amp; Financial Institutions</b>	<b>Hours:10</b>	
Reserve Bank of India: Organization, management and functions, Recent monetary policy of RBI, Banking role and structure, Commercial banks: meaning, functions, present structure, types, e-banking and recent developments in commercial banking, NBFC, Sectorial financial institution NABARD, Exim Bank and PFC.			
<b>UNIT-III</b>	<b>Indian Financial Markets</b>	<b>Hours:8</b>	
Money market: meaning, constituents, functions of money market, Money market instruments: call loans, treasury bills, certificates of deposits, commercial bills, trade bills, Recent trends in Indian money market, Capital market: primary and secondary markets, their role recent developments, Government securities market, SEBI: objectives and functions.			
<b>UNIT-IV</b>	<b>Microfinance Development</b>	<b>Hours:8</b>	
Overview of micro finance; Types of micro finance; Income generating activities and Micro Enterprise Market (demand) analysis, Technological analysis, Socioeconomic analysis, Environmental analysis. Logical framework, Implementation & Monitoring Credit Delivery Methodology; Strategic Issues in Microfinance: Sustainability.			
<b>UNIT-V</b>	<b>Principles and Practice of Insurance</b>	<b>Hours:8</b>	
Principles and Practice of Insurance-Introduction to Risk and Insurance, Types of Insurance-General and Life, Basic principles of General and Life Insurance, Insurance contracts-Regulations on investments (IRDA), Costing and pricing of insurance products, Insurance Premiums & Riders, maturity & Claims.			
<b>Course outcome: At the end of course, the student will know to:</b>			
CO 1	Recognize the functioning and working of various financial institutions in India thus in turn connecting it to the working of Indian economy.	Comprehending (K3)	
CO 2	Interpret the knowledge about the banks, working of various financial instruments in the primary and secondary market in India as well as foreign market.	Applying (K4)	
CO 3	Classify about the working of micro finance instruments in India as well as	Comprehending	



	foreign market.	(K3)
CO 4	Interpret the knowledge about the banking industry and demonstrate the various market demand analysis	Applying (K4)
CO 5	Understand the various insurance products and its regulations.	Understanding (K2)
<b>Text books</b>		
1. Bhole, L M ; Financial Institutions and Markets; McGraw-Hill Education 2. Khan, M.Y.; Indian Financial System; McGraw-Hill Education 3. Pathak, Bharti V.; Indian Financial System; Pearson Education		
<b>Reference Books</b>		
1. Singh, S.P.; Indian Financial System; Wisdom Publication 2. Machiraju, H.R.; Indian Financial System; Vikas Publishing House 3. Dorfman Marks S., “Introduction to Risk Management and Insurance”, 5th Edition, Prentice Hall Inc, Englewood Cliffs N.J.		

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAHR0311</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>HR Analytics</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Understand the concept of HR Analytics, analytic value chain, organizational system				
2	Equip students with knowledge of various HR Analytics Framework HR benchmarks and metrics relevant to organizational goals				
3	Knowledge about the practices using HR analytics to support data-driven decision making				
4	Understand and apply the concept of HR metrics analysis which includes the recruitment & selection analysis, diversity analysis, performance analysis				
5	Understand the concept of HR Scorecard, interventions & formulation of evidence-based practices				
<b>Pre-requisites: Basics of HRM</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>		<b>HR Analytics in Perspective</b>			<b>8 Hours</b>
Introduction to HR Analytics, Defining HR Analytics, Basic of HR Analytics, Role & Capability of Analytics, Evolution of HR Analytics, Typical Application of HR Analytics, Analytic Value Chain, HR Analytics: The wave for HR value creation. Valuing HR Analytics in the Organizational System. Understanding the Organizational System, Locating the HR Challenges in the System.					
<b>UNIT-II</b>		<b>HRA Frameworks</b>			<b>8 Hours</b>
Current approaches to measuring HR and reporting value from HR contributions, Strategic HR Metrics versus Benchmarking, HR Scorecards & Workforce Scorecards and how they are different from HR Analytics, HR Maturity Framework: From level 1 to level 5, HR Analytics Frameworks: (a) LAMP framework; (b) HCM:21 Framework and (c) Talent ship Framework, 5 overarching components of an effective Analytics framework.					
<b>UNIT-III</b>		<b>Insight into Data Driven HR Analytics &amp; HR Metrics</b>			<b>8 Hours</b>
Defining metrics , Demographics, data sources and requirements, Types of data, tying data sets together, Difficulties in obtaining data, Typical data sources, Typical questions faced (survey), Typical data issues, Connecting HR Analytics to business benefit (case studies), Techniques for establishing questions, building support and interest, Obtaining data, Cleaning data (exercise), Supplementing data, ethics of measurement and evaluation. Human capital analytics continuum.					
<b>UNIT-IV</b>		<b>HR Metric Analysis</b>			<b>8 Hours</b>
Recruitment and Selection Analytics: Evaluating Reliability and validity of selection models, finding out selection bias, Predicting the performance and turnover. Diversity Analysis: Equality, diversity, and inclusion, measuring diversity and inclusion, Testing the impact of diversity, Workforce segmentation and search for critical job roles. Performance Analysis: Predicting employee performance, training requirements, evaluating training and development, Optimizing selection and promotion decisions					
<b>UNIT-V</b>		<b>HR Scorecard</b>			<b>8 Hours</b>
Assessing HR Program, engagement, and Turnover, finding money in Analytics, Linking HR Data to operational performance, HR Data, and stock performance. Creating HR Scorecard, develop an HR measurement system, guidelines for implementing a HR Scorecard. Monitoring impact of Interventions: Tracking impact interventions, Evaluating stress levels and value-change. Formulating evidence-based practices and responsible investment. Evaluation mediation process, moderation, and interaction analysis					

<b>Course outcome: At the end of course, the student will be able to:</b>		
<b>CO 1</b>	Understand the concepts & fundamental of HR analytics, value chain & organizational system	Understand (K2)
<b>CO 2</b>	Apply relevant HR Analytics framework for problem solving	Apply (K3)
<b>CO 3</b>	Analyzing different techniques of data driven and HR metrics	Analyze (K4)
<b>CO 4</b>	Apply various analysis techniques and should use for decision making	Apply (K3)
<b>CO 5</b>	Analyze the HR Scorecard, monitoring the impact of interventions & evaluate the mediation process, moderations and interaction analysis.	Analyze (K4)
<b>Text books</b>		
<p>1, Edwards Martin R, Edwards Kirsten Predictive HR Analytics: Mastering the HR Metric”, Kogan Page Publishers, 2019.</p> <p>2. By Dipak Kumar Bhattacharyya, HR Analytics-Understanding Theories and Applications, Sage Publications ,2017.</p>		
<b>Reference Books</b>		
<p>1. HR Analytics: The What, Why and How, by Tracey Smith, Edition ,2013.</p> <p>2. Rachal Johnson, Lindsay McFarlane et.al. Murrey The Practical Guide to HR Analytics, Society For Human Resource,2018</p>		

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAHR0312</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Employee Relations and Labor Law</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Provide conceptual framework of Industrial Relations.				
2	Understand and apply the concept of industrial relations and the system in which it operates.				
3	Make aware of the present state of Industrial relations in India.				
4	Understand the laws relating to Industrial Relations, Social Security and Working conditions and major reforms in labour laws.				
<b>Pre-requisites: Basics of HRM</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>		<b>Employee Relations Management (ERM) &amp; Industrial Relation</b>			<b>Hours 8</b>
Employee Relations Management (ERM) & Industrial Relation: Introduction and Importance of Employee Relations Management, Employee Relations Management Tool, Aspects of Industrial Relations, Emerging challenges of IR in India, Linking Industrial Relations with economic growth of a country, Negotiations and Counseling. Trade Unionism: Development of trade unionism, functions, type and structure, problems & suggestive remedial measures of trade unions, The Trade Unions Act 1926: Objective, Recognition and registration, Industrial Democracy & Participative Management. Case Studies					
<b>UNIT-II</b>		<b>Collective Bargaining</b>			<b>Hours 8</b>
Collective Bargaining: Significance, types & procedure of Collective bargaining Discipline: The Industrial Employment (Standing Orders) Act 1961, Misconduct, Disciplinary Action, Types of Punishments, Code of Discipline, Domestic Enquiry, Grievance Handling in IR: Grievance Settlement Procedure, Industrial Disputes, Preventive & Settlement Machinery in India. Employee Participation and Empowerment: Objectives, Employee Participation, Advantages of Employee Participation, Employee Participation in India, Methods of Participation, Employee Empowerment. Case Studies					
<b>UNIT-III</b>		<b>Labor Law-I</b>			<b>Hours 8</b>
The Factories Act, 1948 & The shop & Establishment Act, 1948; The Payment of Wages Act, 1923; The Workmen's compensation Act, 1972; The Industrial Disputes Act, 1947. Conflict management: Definition, Levels, Sources, Stages, Cause and Effects of conflicts, Reactions and Responses towards conflict, Conflict Resolution Process.					
<b>UNIT-IV</b>		<b>Labor Law-II</b>			<b>Hours 8</b>
The Payment of Minimum Wages Act 1936, The Contract Labor (Abolition & regulative) Act; The ESI Act, 1948; The Trade Unions Act, 1926, Child Labour (Prohibition & Regulation) Act, 1986 and its latest amendment. Scheduled Castes and Scheduled Tribes Commission.					

UNIT-V	Labor Law-III	Hours 8
<p>The payment of Bonus Act, 1965; The payment of Gratuity Act, 1972; The Maternity Benefit Act, 1961; Employee's Provident fund &amp; Miscellaneous Provisions Act, 1952. The Industrial Relations Code Bill, 2020; Code on Social Security Bill, 2020 and the Occupational Safety, Health and Working Conditions Code Bill, 2020.</p>		
<p><b>Course outcome: At the end of course, the student will be able to:</b></p>		
CO 1	Knowledge of Industrial Relation framework	(Understand) K2
CO 2	Competency to understand the importance of Employee Relation within the perspective of Industrial Relation	(Understand) K2
CO 3	Knowledge about relevant Laws of HR management	(Apply) K3
CO 4	Competency to interpret and implement the Labour Laws within organization	(Evaluate) K5
CO 5	Competency to use Collective Bargaining and Grievance redressal Mechanism	(Apply) K3
<p><b>Text books</b></p>		
<p>1. Srivastava SC - Industrial Relations and Labour Laws (Vikas, 2020, 7th Edition.) 2. Taxmann Labour Laws”, Taxmann Allied Services Pvt. Ltd., 2019</p>		
<p><b>Reference Books</b></p>		
<p>1. Monappa Arun, “Industrial Relations and Labor laws”, Tata McGraw Hill Edition, New Delhi,, 2E Edition, 2012. 2. Industrial Relations, Chaganti Satya Venkata Ratnam, Manoranjan Dhal, 2017. 3. Mamoria, Mamoria and Gankar, “Dynamics of Industrial Relations”, Himalaya Publishing House, New Delhi, 2016. 4. D. P Sahoo: Employee Relations Management - Texts and Cases (Sage Publication) 2020</p>		

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAHR0313</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Performance and Reward Management</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Create an understanding of the key concepts of performance management and contemporary methods for administering compensation and rewards in practices				
2	Articulate the benefits of using a performance development plan and the consequences of not having one in place.				
3	Distinguish the elements of an effective, integrated performance development system.				
4	Familiarize the students with the concept of competency mapping and understanding its role in career development				
5	Familiarize students with various aspects of compensation system in India and make them understand various issues linked with the process of fixing salary dearness allowance, bonus, incentive scheme and benefits.				
<b>Pre-requisites: Basics of HRM.</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Performance Management</b>				<b>8 Hours</b>
Introduction to Performance Management System :Meaning, Uses and purpose of Performance Management, Performance Management vs Performance Appraisal, Performance management and its challenges in current scenario, Performance management as a System and Process, Establishing Performance Criterion of developing an Effective Appraisal System, Criteria (KRA, KSA VS KPI). Case Studies					
<b>UNIT-II</b>	<b>Managing Performance</b>				<b>8 Hours</b>
Managing Performance: Methods of managing performance of all the levels of Management, 360 degree Performance Appraisal, MBO and Performance analysis for Individual and organizational development. Human Resource Development: Introduction, Concept & Definition, Features, Objectives & Essentials HRD at Micro and Macro levels , Significance of HRD Distinction between Personnel Function and HRD , Instruments or Mechanism of HRD, Implementation of HRD, HRD in Indian Industry, HRD Strategies. Case Studies					
<b>UNIT-III</b>	<b>Competency Mapping</b>				<b>8 Hours</b>
Contemporary Issues: Potential appraisal, Competency mapping ,Competency mapping approaches & its linkage with Career Development and Succession planning, Balance score card: Introduction and Applications, Advantages and limitations. Benchmarking.					
<b>UNIT-IV</b>	<b>Reward System</b>				<b>8 Hours</b>
Reward System: Compensation- Definition, Function, and significance. Job evaluation: Methods of job evaluation, Inputs to job evaluation, Practical implication for technical/non-technical and executive/managerial positions and significance of wage differentials. Case Studies					
<b>UNIT-V</b>	<b>Compensation System</b>				<b>8 Hours</b>

Compensation: Method of pay and Allowances, Pay structure: Basic Pay, DA, HRA, Gross Pay, Take home pay etc, Calculation of :PF, ESI, BONUS and Gratuity , Cost To Company. Incentive schemes; Methods of payment: Time and piece rate. Fringe benefits & other allowances: Overtime, City compensatory, Travelling etc. Regulatory compliance: Introductions, Wage and Pay commissions, Overview of minimum wages Act-1948 and Equal Remuneration Act-1976. Profit Sharing options; Case Studies.

**Course outcome: At the end of course, the student will be able to:**

CO 1	Knowledge of Performance Management and Performance Appraisal	(Understand) K2
CO 2	Competency to understand the importance of importance of Performance Management	(Understand) K2
CO 3	Knowledge about the Compensation and Reward Systems	(Understand) K2
CO 4	Competency to implement the effective reward systems in the organization	(Evaluate) K5
CO 5	Ability to explain the relevance of competency mapping and understanding its linkage with career development	(Apply) K3

**Text books**

1. Robert Bacal, Performance Management, McGraw-Hill Education, 2012.
2. TV Rao, Performance Management, Toward Organizational Excellence, 2016.

**Reference Books**

1. Armstrong's Handbook of Performance Management: An Evidence-Based Guide to Delivering High Performance, Kogan Page Publishers, 2009.
2. Kevin , R. Murphy , Jeanette N. Cleveland, Madison E. Hanscom ., Performance Appraisal and Management , Sage Publications, 2018.
3. Arup Verma, Pawan Budhwar, Performance Management Systems: An Experiential Approach, Sage Publications, 2019.

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAMK0311</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Digital and Social Media Marketing</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Provide understanding of digital and social media marketing practices.				
2	Impart learning on various digital channels and how to acquire and engage consumers online.				
3	Provide understanding of the concept of social media platforms				
4	Provide insights on building organizational competency by way of digital marketing practices and cost considerations.				
5	Develop understanding of the latest digital practices for marketing and promotion.				
<b>Pre-requisites:</b> Understanding of Basics of marketing concepts and social media platforms					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Digital Marketing</b>				<b>08 Hours</b>
Introduction to Digital Marketing: The new digital world - trends that are driving shifts from traditional marketing practices to digital marketing practices, the modern digital consumer and new consumer's digital journey. Marketing strategies for the digital world - latest practices. Skills required in Digital Marketing. Marketing Mix (7Ps) in online context, Integrated Internet Marketing communication.					
<b>UNIT -2</b>	<b>Acquiring &amp; Engaging Users through Digital Channels</b>				<b>08 Hours</b>
Acquiring & Engaging Users through Digital Channels: Understanding the relationship between content and branding and its impact on sales. Digital Promotion Technique: overview of search engine optimization (SEO), search engine marketing, mobile marketing, video marketing, email marketing, viral marketing, content marketing and social-media marketing, Marketing gamification, Online campaign management; using marketing analytic tools to segment, target and position.					
<b>UNIT-3</b>	<b>Social Media Marketing</b>				<b>08 Hours</b>
Social Media Marketing –The Role of Social Media Marketing, Meaning, Purpose, types of social media websites. Introduction to Blogging, Create a blog post for your project. Include headline, imagery, links and post, Content Planning and writing. Introduction to Facebook, Twitter, Google +, LinkedIn, YouTube, Instagram and Pinterest; their channel advertising and campaigns.					
<b>UNIT-4</b>	<b>Designing Organization for Digital Success</b>				<b>08 Hours</b>
Designing Organization for Digital Success: Digital transformation, digital leadership principles, online P.R. and reputation management. ROI of digital strategies, how digital marketing is adding value to business, and evaluating cost effectiveness of digital strategies. Planning website design, understanding site user requirement, site design and structure, develop and testing site.					
<b>UNIT-5</b>	<b>Digital Innovation and Trends</b>				<b>08 Hours</b>
Digital Innovation and Trends: The contemporary digital revolution, digital transformation framework; security and privatization issues with digital marketing, Understanding trends in digital marketing – Indian and global context, online communities and co-creation. Managing online customer experience and e-survey.					



<b>Course outcome: At the end of course, the student will be able</b>		
CO1	Students will develop an understanding of digital and social media marketing practices.	Apply (K3),
CO2	Students will develop understanding of the social media platforms	Evaluate (K5)
CO3	Students will acquire the skill to acquire and Engage consumers online	Create (K6)
CO4	Students will develop understanding of building organizational competency by way of digital marketing practices and cost considerations	Create (K6)
CO5	Students will develop understanding of the latest digital practices for marketing and promotion.	Analyze (K4)

**Text Book**

1. Mouty Maiti: Internet Marketing, Oxford University Press India, First Edition
2. Vandana, Ahuja; Digital Marketing, Oxford University Press India, First Edition

**Reference Book**

1. Eric Greenberg, and Kates, Alexander; Strategic Digital Marketing: Top Digital Experts Share the Formula for Tangible Returns on Your Marketing Investment; McGraw-Hill Professional, First Edition
2. Ryan, Damian; Understanding Digital Marketing: marketing strategies for engaging the digital generation; Kogan Page, First Edition
3. Tracy L. Tuten & Michael R. Solomon: Social Media Marketing, Sage Publication, Second Edition

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAMK0312</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Product and Brand Management</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration:40 Hours</b>	
1	Learn fundamentals of Product and Brand Management.				
2	Make understand about competition at product level as well as brand level.				
3	Understand the role of brands, components of brands, brand equity				
4	understand the Brand Positioning and Brand marketing Programs				
5	Provide insights into the conceptual framework for Strategic Brand Management.				
<b>Pre-requisites:</b> Having an understanding of Basics of Product and Brand Management					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>		<b>Introduction to Product Management</b>			<b>08 Hours</b>
Introduction to Product & Product Related Concepts: Product Management & Scope, Define Product, Classification of Product, Product Levels, Product Hierarchy. Product Life Cycle: Product Life Cycle Stages and corresponding Strategies and Product Evaluation. Product Portfolio: Concept, Factors influencing Product Portfolio, The BCG Growth Matrix, Shell's Directional Policy Matrix					
<b>UNIT -2</b>		<b>New Product Strategy</b>			<b>08 Hours</b>
New Products: New Product Categories, Organization for Product Management, prototyping, New Product Development Process, test marketing. New product strategy: The need for Product Innovation Strategy, the components of new Product Strategy Commercialization: Test Marketing, Time to Market, Breaking into the Market, Managing Growth, Resistance to Change, Leveraging new Product Growth, Sustaining Differentiation Managing the mature Product: Offensive Strategies, Extending the product life cycle, Customer Relationship Management.					
<b>UNIT-3</b>		<b>Introduction to Brand Management and Brand Equity</b>			<b>08 Hours</b>
Branding Basics: Brand, branding and significance of branding, Branding challenges and opportunities, Brand equity concept, Strategic brand management process, Identifying and establishing brand positioning, Planning and implementing brand marketing programs, Measuring and interpreting brand performance, growing and sustaining brand equity. Brand Equity concept and Brand Equity Models: Brand Asset Valuation, Aaker Model, Brand Resonance.					
<b>UNIT-4</b>		<b>Brand Positioning and Brand Marketing Programs</b>			<b>08 Hours</b>
Brand knowledge, Customer-based Brand equity Sources of brand equity - Brand Awareness, Brand Image, The Four steps of brand building, Creating customer value Identifying and establishing brand positioning, Positioning guidelines. Planning and Implementing Brand Marketing Programs: Choosing brand elements to build brand equity, Options and tactics for Brand, Integrating marketing communication to build brand equity, Conceptualizing the leveraging process, Co- branding, Celebrity Endorsement.					
<b>UNIT-5</b>		<b>Measuring, Growing and Sustaining Brand Equity</b>			<b>08 Hours</b>
The brand value chain, Designing brand tracking studies, Capturing customer mind set through quantitative research techniques. Brand architecture, Brand hierarchy, Designing brand strategy, Brand extensions- advantage and disadvantage- Reinforcing brands, Revitalizing brands, Brand Failures.					

<b>Course outcome: At the end of course, the student will be able</b>		
CO1	Students will develop an understanding of Product and brand management	Apply (K3)
CO2	Students will develop understanding of the Product Level and Brand level	Evaluate (K5)
CO3	Students will acquire the skill to Brand management and Brand equity	Create (K6)
CO4	To enable learners to understand basics of brand equity, insights into the conceptual framework for Strategic Brand Management	Create (K6)
CO5	Understand the various aspects of Product Management and Product Strategy, strategic significance of Product and Brand Management in business.	Analyze (K4)
<b>Text Book</b>		
<ol style="list-style-type: none"> <li>1. Product Strategy and Management, Michael Baker and Susan Hart, Pearson Education, Second Edition.</li> <li>2. Strategic Brand Management, Kevin Lane Keller, M.G. Rameswaram and Isaac Jacob, Pearson Education, Third Edition.</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Product Management, Donald R. Lehmann and Russell S. Winer, TMH, Fourth Edition</li> <li>2. Innovation Management and New Product Development, Paul Trott, Pearson, Fourth Edition</li> <li>3. Strategic Brand Management, Kapferer, J.-N. (1997). London: Kogan Page Limited</li> <li>4. Brand Management, H. V. Verma, 2004, New Delhi: Excel Books</li> <li>5. Branding, A reference guide to solving your toughest branding problems and strengthening your market position, B. VanAuken, 2007. Jaico Publishing House</li> </ol>		
<b>Web resources:</b>		
<ol style="list-style-type: none"> <li>1. <a href="http://www.entrepreneur.com/">http://www.entrepreneur.com/</a></li> <li>2. <a href="http://www.ibef.org.com">http:// www. ibef.org.com</a></li> </ol>		

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAMK0313</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Consumer Behavior &amp; Advertising Management</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Understand consumer behavior and explain the consumer decision making process.				
2	Define external and internal influences on buying behavior.				
3	Understand advertising management and its framework.				
4	Understand the theoretical aspects of advertising effectiveness on consumers.				
5	Understand the ethics related to advertising and consumer behavior. Also creates understanding of Budgetary control in advertising.				
<b>Pre-requisites: Having basic understanding of Consumer Behavior &amp; Advertising</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Consumer Behavior</b>				<b>08 Hours</b>
Introduction: Introduction to Consumer Behavior; Applications of consumer behavior knowledge in marketing. Consumers and Customer, Consumer Behavior in the Contemporary Environment. Introduction, Problem Recognition, Information Search, Evaluation of Alternatives, Post-Purchase Behavior, Attribution theory and Diffusion of Innovation.					
<b>UNIT-II</b>	<b>Consumers as individuals and in the social context</b>				<b>08 Hours</b>
Consumers as individuals and in the social context: Consumer Perception, Consumer Attitude Formation & Change, Behavioral learning theories and cognitive learning theories to consumer behavior. Reference Groups, Family, Gender & Age Influences, Social Class & Consumer Behavior, Cultural Influences on Consumer Behavior.					
<b>UNIT-III</b>	<b>Advertising Management</b>				<b>08 Hours</b>
Overview of Advertising Management: Introduction, Meaning and Framework of Advertising; Defining Advertising; Advertising to Persuade the Buyer; Importance of Advertising in Marketing; Role of Advertising in Marketing Mix and Positioning; Advertisers and Advertising Agencies; Choosing an Advertising Agency.					
<b>UNIT-IV</b>	<b>Concepts of Advertising and its kinds</b>				<b>08 Hours</b>
Structure of an Advertising Agency: Introduction, Overview of an Advertising Agency; Marketing research department; Ancillary Services; Interfacing with Client's Organization; Integration of Services. Advertising Effectiveness; Kinds of Advertising Objectives; The Advertising Communication System, its Process, Advertising Copy and Design strategy , Types of advertising copy; Creativity in Advertising.					
<b>UNIT-V</b>	<b>Ethics and Budget of Advertising</b>				<b>08 Hours</b>
Advertising Budgets: Introduction, Factors Influencing Budget Setting, Typical Spending Patterns, Common Budgeting Approaches, Budgeting Methods, Decision Support System (DSS), Structure of DSS, Allocating the Marketing Communication Budget. Ethics in Advertising, Introduction, The Advertising Standards Council of India (ASCI); Forms of Ethical Violations; Misleading advertising; Advertising to children, Product endorsements, Stereotyping, Cultural, religious and racial sensitivity in advertising.					
<b>Course outcome: At the end of course, the student will be able to</b>					

CO 1	Understand the three major influences on customer choice: the process of human decision making in a marketing context; the individual customers make up; the environment in which the customer is embedded.	Understand (K2)
CO 2	Develop the cognitive skills to enable the application of the above knowledge to marketing decision making and activities.	Create (K6)
CO 3	Understand advertising management, its role, importance, types in marketing positioning,	Understand (K2)
CO 4	Develop the understanding of advertising agency advertising effectiveness, types , communication process and design strategy.	Apply (K3)
CO 5	Understand the factors influencing budget setting and ethics related to advertising and consumer behavior.	Evaluate(K5)

**Text books**

1. Consumer Behavior, Schiffman, L. G. and Kanuk, L. L. Pearson.
2. Kruti Shah & Alan D' Souza: Advertising & promotions an IMC Perspective-McGraw Hill education
3. George E Belch & Michael A Belch: Advertising and promotion- An integrated Marketing Communication Perspective-McGraw Hill Education

**Reference Books**

1. Chunawala & Sethia: Foundations of Advertising Theory & Practice; Himalaya Publishing.
2. Copley Paul: Marketing Communications Management Concepts &Theories, Cases and Practices; Butterworth Heinemann Publication.

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBABI0311</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>ERP Modules</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>					<b>Duration: 40 Hours</b>
1	Impart knowledge about Enterprise Resource Planning (ERP)				
2	Impart knowledge of related technologies				
3	Impart knowledge about implementation of ERP				
4	Analyze the applications of ERP at operational levels				
5	Analyze the applications of ERP at managerial practices				
<b>Pre-requisites:</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to ERP</b>	<b>8Hours</b>			
Enterprise: Overview of Enterprise Resources & Business Functions, Classifications of Business Processes, Business Process Management System; Information: Characteristics and Value of information in enterprise; Information System: Components of an Information System, Characteristics and uses of Decision Support System, Executive Information System & Management Information System; Business Process Modeling: Automation and Structuring of Business Processes, Business Process Reengineering (BPR). Cross Functional and Integrated Enterprise Systems;					
<b>UNIT-II</b>	<b>ERP Technologies</b>	<b>8 Hours</b>			
Enterprise Systems and Enterprise Resources Planning (ERP): Characteristics of Enterprise Systems, Enterprise Applications and ERP, Evolution of ERP System, Benefits of an ERP System; ERP Related Technologies: Database & Data Warehouse, Data Mining, On-Line Analytical Processing, Workflow Management Systems.					
<b>UNIT-III</b>	<b>ERP Modules</b>	<b>8 Hours</b>			
ERP Modules: Finance, Production planning, Sales & Distribution, Human resource management (HRM), Inventory Control System, Quality Management, Cost Management, Plant Maintenance Management, ERP in Supply Chain Management and Customer Relationship Management, CAQ & CIQ. ERP Solutions in the markets and ERP Domains: Sector specific ERP Solutions, Introduction and Characteristics of SAP, BAAN and Oracle ERP.					
<b>UNIT-IV</b>	<b>ERP Implementation</b>	<b>8 Hours</b>			
ERP and Value Chain: Impacts of ERP on Value Chain (Porter's Value Chain Model), Competitive Advantages of ERP; Future Directions in ERP: New Trends in ERP, ERP to ERP II, ERP and e-business, SOA Factors in ERP; ERP Implementation: Evaluation and Selection of ERP Package, Project Planning, Testing & End User's Training, Post Evaluation and Maintenance, Issues and Challenges in ERP Implementation, Latest ERP Implementation Methodologies;					
<b>UNIT-V</b>	<b>Post ERP Implementation</b>	<b>8 Hours</b>			
ERP Project Team: Composition, Organization and Working of ERP Implementation Team, Success and Failure Factors in ERP Project. Post ERP Implementation: Organizational Change Management, Post Implementation Review, Post Implementation Support, ERP Security. IBM SPSS/Sales force/SAS Application.					
<b>Course outcome: At the end of course, the student will be able to:</b>					
CO1	Knowledge of ERP Technology and its importance	(Understand) K2			

CO2	Able to analyze the organizational readiness for ERP	(Analyze) K4
CO 3	Able to implement ERP in functional area of businesses and management	(Analyze) K4
CO4	Interpreting the impacts of ERP on business processes	(Evaluate) K5
CO5	Understanding the Market Trends in ERP applications	(Apply) K3
<b>Text Books</b>		
1.	ERP Demystified: Leon, Alexis (McGraw-Hill Education)	
2.	Concepts in Enterprise Resource Planning: Joseph, A. Brady, Ellen, F. Monk and Wangner, Bret J. (Thomson Learning )	
3.	ERP in practice – Vaman– TMH	
<b>Reference Books</b>		
1.	Daniel E.O’Leary, Enterprise Resource Planning Systems, Cambridge University Press, 2002.	
2.	Ellen Monk, Bret Wagner, Concepts in Enterprise resource planning, Cengage learning, Third edition, 2009.	

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBABI0312</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Machine Learning &amp; Artificial Intelligence</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Introduce the basic concepts of machine learning.				
2	Provide a strong foundation of fundamental concepts in AI.				
3	Help students to learn the application of machine learning / AI algorithms in different fields of Management.				
4	Enable the student to apply these techniques in application which involve perception, reasoning and learning.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Foundation of Machine Learning</b>				<b>8 Hours</b>
<p><b>Data Mining Introduction:</b> Overview, Motivation, Definition &amp; Functionalities, Data Processing, Form of Data Preprocessing, Data Cleaning: Missing Values, Noisy Data, (Binning, Clustering, Regression, Computer and Human inspection), Inconsistent Data, Data Integration and Transformation. Data Reduction: -Data Cube Aggregation, Dimensionality reduction, Data Compression, Numerosity Reduction, Discretization and Concept hierarchy generation.</p> <p><b>Machine Learning (ML)--</b> ML Techniques overview -- Validation Techniques (Cross-Validations) -- Feature Reduction/Dimensionality reduction -- Principal components analysis (Eigen values, Eigen vectors, Orthogonality).</p>					
<b>UNIT-II</b>	<b>Supervised Learning Techniques</b>				<b>8 Hours</b>
<p><b>Classification:</b> Definition, Data Generalization, Analytical Characterization, Analysis of attribute relevance, Mining Class comparisons, Statistical measures in large Databases, Statistical-Based Algorithms, Distance-Based Algorithms, Decision Tree-Based Algorithms.</p> <p><b>Decision Trees --</b> ID4--C4.5-- CART ---Basic Ensembles methods – Bagging &amp; boosting and its impact on bias and variance -- C5.0 boosting -- Random forest – Advanced Gradient Boosting Machines.</p>					
<b>UNIT-III</b>	<b>Un-Supervised Learning Techniques</b>				<b>8 Hours</b>
<p><b>Clustering-</b> Distance measures -- Different clustering methods (Distance, Density, Hierarchical) -- Iterative distance-based clustering-- Dealing with continuous,--categorical values in K-Means--Constructing a hierarchical cluster-- K-Medoids-- k-Mode and density-based clustering -- Measures of quality of clustering</p> <p><b>Association Rule mining--</b> The applications of Association Rule Mining: Market Basket-- Recommendation Engines, etc.-- A mathematical model for association analysis-- Large item sets-- Association Rules -- Apriori--Constructs large item sets with mini sup by iterations-- Interestingness of discovered association rules-- Application examples-- Association analysis vs. classification -- FP-trees. - Machine Learning Applications across Industries---Healthcare— Retail--Financial Services— Manufacturing—Hospitality--Cloud Based ML Offerings.</p>					
<b>UNIT-IV</b>	<b>Introduction of Artificial Intelligence</b>				<b>8 Hours</b>
<p><b>Introduction :</b> What is Artificial Intelligence (AI)---Definitions, The Foundations of AI, The History of AI, Applications of Artificial Intelligence, Agents and Environments, The Concept of Rationality, The Nature of Environments, The Structure of Agents, Problem Solving Agents, Computer Vision. Natural Language Possessing.</p>					
<b>UNIT-V</b>	<b>Searching &amp; Trends in Artificial Intelligence.</b>				<b>8 Hours</b>



**Introduction to Search** : Searching for solutions, Uniformed search strategies, Informed search strategies, Local search algorithms and optimistic problems, Adversarial Search, Search for games, Alpha - Beta pruning.

**Recent Trends:** Neural networks, Reinforcement learning, Emerging NN architectures -- Recurrent Neural Networks, Building recurrent Neural Networks, Long Short-Term Memory, Time Series Forecasting. AI in Cyber security, The Fusion of AI and IoT, Conversational AI& Expert System.

**Course outcome:** At the end of course, the student will be able to:

CO1	Understand the concepts of data mining & machine learning	(Understand) K2
CO2	Use different machine learning techniques to design AI Machine and enveloping applications for real world problems.	(Apply) K3
CO 3	Use non supervised learning techniques to design and solve AI Issues.	(Apply) K3
CO4	Demonstrate fundamental understanding of artificial intelligence.	(Apply) K3
CO5	Apply basic principles of AI in solution that require problem solving , knowledge presentation and learning.	(Create) K6

**Text Books**

1. Jiawei Han MichelineKamber Jian Pei, “Data Mining: Concepts and Techniques”, Morgan Kaufmann.
2. Alex Berson, Stephen J. Smith “Data Warehousing, Data-Mining & OLAP”, TMH
3. Elaine Rich and Kevin Knight: Artificial Intelligence , Tata McGraw Hill

**Reference Books**

1. Artificial Intelligence: A Modern Approach. Stuart Russell, Peter Norvig, Pearson Education 2nd Edition.
2. Elaine Rich and Kevin Knight: Artificial Intelligence , Tata McGraw Hill
3. Dan W.Patterson, Introduction to Artificial Intelligence and Expert Systems, PrenticeHall of India
4. David W Rolston: Principles of Artificial Intelligence and Expert System Development, McGraw Hill

<b>MBA SECOND YEAR</b>						
<b>Course Code</b>	<b>AMBABI0313</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	
<b>Course Title</b>	<b>Cloud &amp; Big Data</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>	
<b>Course objective: Objective of this course is to:</b>				<b>Duration:40 Hours</b>		
1	Provide students with the fundamentals and essentials of Cloud Computing.					
2	Enable students to start using and adopting Cloud Computing services and tools in their real life scenarios.					
3	Understand the importance of information management for a business organization.					
4	Provide basic knowledge on Big Data.					
<b>Course Contents / Syllabus</b>						
<b>UNIT-I</b>	<b>Introduction to Cloud Computing</b>				<b>8 Hours</b>	
Introduction to Cloud Computing – Definition of Cloud – Evolution of Cloud Computing – Underlying Principles of Parallel and Distributed Computing –Cloud Characteristics – Elasticity in Cloud – On-demand Provisioning.						
<b>UNIT-II</b>	<b>Cloud Architecture, Services and Storage.</b>				<b>8 Hours</b>	
Layered Cloud Architecture Design – NIST Cloud Computing Reference Architecture – Public, Private and Hybrid Clouds – IaaS – PaaS – SaaS – Architectural Design Challenges – Cloud Storage – Storage-as-a-Service – Advantages of Cloud Storage – Cloud Storage (Block Vs Object Storage) , Cloud Providers – AWS						
<b>UNIT-III</b>	<b>Cloud Enabling Technologies</b>				<b>8 Hours</b>	
Service Oriented Architecture – REST and Systems of Systems – Web Services– Publish-Subscribe Model Basics of Virtualization – Types of Virtualization– Implementation Levels of Virtualization – Virtualization Structures – Tools and Mechanisms – Virtualization of CPU – Memory – I/O Devices – Virtualization Support and Disaster Recovery						
<b>UNIT-IV</b>	<b>Resource Management and Security in Cloud</b>				<b>8 Hours</b>	
Inter Cloud Resource Management – Resource Provisioning and Resource Provisioning Methods – Global Exchange of Cloud Resources – Security Overview – Cloud Security Challenges – Software-as-a Service Security – Security Governance – Virtual Machine Security – IAM – Security Standards.						
<b>UNIT-V</b>	<b>Cloud technologies and Advancements</b>				<b>8 Hours</b>	
Introduction to Big Data, 5 V's of Big Data & Hadoop – Virtual Box — Google App Engine – Programming Environment for Google App Engine — Open Stack – Federation in the Cloud – Four Levels of Federation – Federated Services and Applications – Future of Federation. Research Trends in Cloud: Fog Computing.						
<b>Course outcome: At the end of course, the student will be able to:</b>						
CO 1	Provide students with fundamentals and essentials of Cloud Computing.					(Understand) K2
CO 2	Realize cloud infrastructures by using IaaS Software, while also developing cloud applications by utilizing PaaS Software.					(Create) K6
CO 3	Generate new ideas and innovations in cloud computing using virtualization					(Create) K6

CO 4	Gain knowledge about the security in Cloud Computing.	(Apply) K3
CO 5	Learn the application of recent Cloud Technologies	(Analyze) K4
<b>Text books</b>		
1. Kai Hwang, Geoffrey C. Fox, Jack G. Dongarra, “Distributed and Cloud Computing, From Parallel Processing to the Internet of Things”, Morgan Kaufmann Publishers, 2012.		
2. Rittinghouse, John W., and James F. Ransome, —Cloud Computing: Implementation, Management and Security, CRC Press, 2017		
3. . RajkumarBuyya, Christian Vecchiola, S. ThamaraiSelvi, —Mastering Cloud Computing, Tata Mcgraw Hill, 2013.		
4. Toby Velte, Anthony Velte, Robert Elsenpeter, “Cloud Computing – A Practical Approach, Tata Mcgraw Hill, 2009		
5. George Reese, “Cloud Application Architectures: Building Applications and Infrastructure in the Cloud: Transactional Systems for EC2 and Beyond (Theory in Practice), O’Reilly, 2009.		
<b>Reference Books</b>		
1. Rhoton, John; Cloud Computing Explained: Implementation Handbook for Enterprises; Kindle Edition		
2. Linthicum, David S.; Cloud Computing and SOA Convergence in your Enterprise: A StepbyStep Guide; Addison Wesley Information Technology Series		

<b>Course Name: MBA/Second Year-Semester 3</b>						
<b>Course Code</b>	<b>AMBALS0312</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>	
<b>Course Title</b>	<b>Supply chain Planning and Demand Forecasting</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	
<b>Course Objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>		
	To provide fundamental understanding about the planning in Supply Chain Management and create strategies through demand forecasting.					
<b>Course Contents / Syllabus</b>						
<b>UNIT-I</b>	<b>Fundamentals of Supply Chain Planning</b>					<b>8 Hours</b>
Introduction, meaning and Components of Supply Chain Planning, Evolution Management and Latest Trends in Supply Chain Management, Understanding Logistics and Total Cost Management, Integrated Logistics Management. Introduction to Supply Chain Structures and Supply Chain Strategies. Supply Chain Operations Reference Model (SCOR), Case Studies and Latest Updates.						
<b>UNIT-II</b>	<b>Supply Chain Strategies</b>					<b>9 Hours</b>
Preparing the Supply Chain Strategy, Stages and Performance Attributes of Supply Chain Strategy, Process Drivers of Supply Chain Performance, Supply Chain Strategy Matrix, Concept of Supply Chain Strategic Fit, Supply Chain Strategy Performance Metrics, Supply Chain Strategy. Risk Management. SCRM Maturity Model, Case Studies and Latest Updates.						
<b>UNIT-III</b>	<b>Agility in Supply Chain and Lean Thinking</b>					<b>7 Hours</b>
The Concept of Agility in Supply Chain. Agile Drivers and Practices in Supply Chain- Joint Decision, End Customer First, Shared Goal. Inter firm Planning and Control for Supply Chain. Application of Lean Thinking to Business Processes and Supply Chain. Case Studies and Latest Update.						
<b>UNIT-IV</b>	<b>Demand Management in SCM</b>					<b>9 Hours</b>
Components of Demand Management, Formulating Demand Strategies, Demand Planning. Developing the Demand Forecast, Creating the Supply Plan, Balancing the Demand and Supply Plans of Production, Implementing Sales and Operations Planning (S&OP) Grid in SCM. Case Studies and Latest Updates.						
<b>UNIT-V</b>	<b>Integrating the Supply Chain</b>					<b>7 Hours</b>
Internal Integration- Function to Function. Intercompany Integration, Electronic Integration, Efficient Customer Response (ECR) in Supply Chain. Collaborative Planning, Forecasting and Replenishment, Overview of JIT and Quick Response. Enabling Sustainability in Supply Chain Strategy. Case Studies and Latest Updates.						

<b>Course outcome: At the end of course, the student will be able to:</b>		
CO1	Understand various fundamentals for effective Supply Chain Planning.	Understanding (K2)
CO2	Analyse various risk involved in Supply Chain Management.	Analysing (K4)
CO3	Understand the concept of agility in supply chain and application of lean thinking.	Understanding (K2)
CO4	Apply various techniques of planning and forecasting of demand in real world.	Applying (K3)
CO5	Understand the integration of the Supply Chain with business processes.	Understanding (K2)

**Text Books:**

3. Ross, D.F. Distribution Planning and Control- Managing in the Era of Supply Chain Management. Springer
4. Meredith, J. R., & Shafer, S. M. (2023). Operations and supply chain management for MBA. John Wiley & Sons.
5. Foster, S. T., & Gardner, J. W. (2022). Managing quality: Integrating the supply chain. John Wiley & Sons.

**Reference Books:**

4. Ivanov, D., Tsipoulaidis, A., & Schönberger, J. (2019). Global supply chain and operations management: A decision-oriented introduction to the creation of value (Vol. 2). Cham, Switzerland: Springer International Publishing.
5. Leeman, J. J. (2020). Supply Chain Management: Fast, Flexible Supply Chain in Manufacturing and Retailing--. BoD–Books on Demand.
6. Phadnis, S. S., Sheffi, Y., & Caplice, C. (2022). Strategic Planning for Dynamic Supply Chains: Preparing for Uncertainty Using Scenarios. Palgrave Macmillan.
7. Rushton, A., Croucher, P., & Baker, P. (2022). The handbook of logistics and distribution management: Understanding the supply chain. Kogan Page Publishers.

**Links:**

1. <https://youtu.be/sWdmGcaTras>
2. <https://youtu.be/qeadkAL5YwY>
3. <https://youtu.be/Q35AsGJmCAM>
4. <https://youtu.be/pQBOR8E3Sh4>

<b>Course Name: MBA/Second Year- Semester 3</b>					
<b>Course Code</b>	<b>AMBALS0311</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Procurement and Vendor Development</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>		<b>Duration: 40 Hours</b>			
	To give an understanding of domestic and international procurement and sourcing strategies in Supply Chain Management.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Framework of Procurement Management</b>				<b>8 Hours</b>
Introduction to Sourcing, Sourcing v/s Procurement, Introduction to Purchasing and Supply Chain Management, Purchasing Process, Purchasing Policies & Procedures, 8 R's of Purchasing, Role of a Purchase Manager. Risks associated with purchasing process and its mitigation, Placing Orders, Budgets and Expense Allocation, Make or buy decision. Types and Methods of Sourcing in Retail, Organising for purchase, Case Studies.					
<b>UNIT-II</b>	<b>Buying Process</b>				<b>9 Hours</b>
Fundamental Steps of the Buying Process, Terms and Condition of Purchase, Buying Documentation, Negotiation in Procurement, Use of IT in Sourcing, Global Tenders and E-Procurement, Reverse Auctions, Overview of Global Purchasing, Case Studies. Terms and Condition of Purchase, Buying Documentation, Negotiation in Procurement, Use of IT in Sourcing, Global Tenders and E-Procurement, Reverse Auctions, Overview of Global Purchasing, Case Studies and Latest Updates.					
<b>UNIT-III</b>	<b>Vendor Selection</b>				<b>7 Hours</b>
Vendor Selection Process, Evaluation of Existing Vendors, Vendor quality management: Vendor management and development – Vendor performance measurement. Rationalization and optimization: Creating a manageable supply base., New Vendor Development Process, Managing Quality in Sourcing, Key Supplier Account Management, Vendor Relationship Development, Vendor Monitoring, Promoting SME suppliers. Case Studies.					
<b>UNIT-IV</b>	<b>Aligning Inventory Objectives with Procurement</b>				<b>9 Hours</b>
Integrating the objectives of purchasing management and Material Management with Supply Chain, Role of purchasing in Supporting Inventory Objectives. A structured approach to cost reduction - Price analysis - Cost analysis techniques - Total cost of ownership - Collaborative approaches to cost management, Hedging vs. Forward Buying, Managing Price Fluctuation and Volatility in International Finance, Payment Modes, Matching Supply with Customer Demand, Managing Inward Logistics. Case Studies					
<b>UNIT-V</b>	<b>Global Procurement Management</b>				<b>7 Hours</b>
Global Trade Barriers, Dealing with International Suppliers, UNO and GATT conventions, Legal, Socio-Cultural Issues in International Buying Environmental Issues & Green Purchasing, Industry Best Practices, Measurement of Sourcing Performance, Benchmarking in Retail Purchasing. Case Studies.					

<b>Course outcome: At the end of course, the student will be able to:</b>		
CO1	Understand the framework of procurement for SCM	Understanding (K2)
CO2	Understand the buying process and documentation required for effective SCM	Understanding (K2)
CO3	Apply vendor selection processes in SCM and Logistics	Applying (K3)
CO4	Apply techniques of inventory management with procurement	Applying (K3)
CO5	Analyse different issues and best practices for global procurement	Analysing (K4)
<b>Text books</b>		
1. Sollish, F. and Semanch, J. <i>Strategic Global Sourcing: Best Practices</i> . Wiley Publications 2. Chopra and Miendl. <i>Supply Chain Management: Strategy, planning and operation</i> . Pearson Books		
<b>Reference Books</b>		
1. Gordon. S. R. <i>Supplier Evaluation and Performance Excellence: A Guide to Meaningful Metrics and Successful Results</i> . 2. Sahay B.S. <i>Emerging Issues in Supply Chain Management</i> . McMillan 3. Harrison A. <i>Logistics Management and Strategy</i> . Pearson		
<b>Links:</b>		
<a href="https://youtu.be/Hsq-oqLLP0A">https://youtu.be/Hsq-oqLLP0A</a> <a href="https://youtu.be/2v19C_BTYdE">https://youtu.be/2v19C_BTYdE</a> <a href="https://youtu.be/a2n10AbEwxg">https://youtu.be/a2n10AbEwxg</a>		

<b>Course Name: MBA Second Year / Semester 3</b>					
<b>Course Code</b>	<b>AMBALS0313</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Warehouse and Distribution Management</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>		<b>Duration: 40 Hours</b>			
	To provide in-depth understanding of Warehouse Management and distribution channels in Supply Chain with basic understanding of various modes of transportations and its uses.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Warehouse Management</b>				<b>8 Hours</b>
Importance of Warehousing and Warehousing Functions, Types of Warehouses, Specialized Warehouse Services, Developing Warehouse Strategies Order Picking and Shipping, Receiving and Stocking, Sizing the Warehouse, Warehouse Layout & Automation.					
<b>UNIT-II</b>	<b>Warehouse Management Process</b>				<b>8 Hours</b>
Picking Strategies and Equipment, Order Picking Receiving and Put Away, Replenishment, Stock Counting, Cycle Counting, Return Processing and Dispatch, Documentations.					
<b>UNIT-III</b>	<b>Warehouse Costs and Performance Management</b>				<b>8 Hours</b>
Costs in Warehousing, Return on Investment, Traditional vs Activity Based Costing, Logistics Charging Methods, Selecting appropriate Performance Measures, Integrated Performance Model, Benchmarking, Balanced Scorecard, Health and Safety issues in Warehousing.					
<b>UNIT-IV</b>	<b>Distribution Management</b>				<b>8 Hours</b>
Distribution Function, Basic Supply Chain Distribution Formats, Alternative Distribution Channel Formats, Role of Distribution Channels, Service Outputs and Functions of Distribution Channels, Transaction Flows, Inventory Flows, Substituting Information for Inventory, Sustainability in Distribution.					
<b>UNIT-V</b>	<b>Modes of Transportation</b>				<b>8 Hours</b>
Modes of Transport-Rail, Road, Water, Air, Pipeline with their Characteristics and Cost Structure, Carrier Selection Decision, Determinants of Carrier Selection, Legal Classification of Carriers, Role of Couriers as Carriers. Transportation Costs - Fixed, Variable, Joint and Common Costs, Product Related & Market Related Factors Influencing Transport Cost.					



<b>Course outcome: At the end of course, the student will be able to:</b>		
CO1	Analyze the need for warehouses and its applications with real world problems	Analyze (K4)
CO3	Implement Processes for Effective Warehouse Management and Aligning it with SCM Strategy	Apply (K3)
CO3	Evaluate the Cost and Performance Factors in Warehouse Management.	Evaluate (K5)
CO4	Analyze various Distribution Management Channels for Effective SCM and Logistics	Analyze (K4)
CO5	Analyze the requirement and use of Various Modes of Transportations	Analyze (K4)
<b>Text books</b>		
<ol style="list-style-type: none"> <li>1. Ross, D. F. (2019) Distribution Planning and Control Managing in the Era of Supply Chain Management. Springer</li> <li>2. Richard G. (2018) Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse. Kogan Press</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Bowersox, D. J. &amp; Closs D. J. (2019). Logistical Management. Tata McGraw Hill Publishing Co. Ltd</li> <li>2. Waters, D. (2020) : Logistics. Palgrave Macmillan</li> </ol>		
<b>Links:</b>		
<a href="https://www.youtube.com/watch?v=IMPbKVb8y8s">https://www.youtube.com/watch?v=IMPbKVb8y8s</a> <a href="https://supplychainhandbook.jsi.com/wp-content/uploads/2017/01/JSI_Supply_Chain_Manager's_Handbook_Chpt.8_Final.pdf">https://supplychainhandbook.jsi.com/wp-content/uploads/2017/01/JSI_Supply_Chain_Manager's_Handbook_Chpt.8_Final.pdf</a>		

Course Name: MBA Second Year/Semester 3					
Course Code	AMBABA0312	L	T	P	Credit
Course Title	Introduction to Data Science	3	0	0	3
Course Objective: Objective of this course is to:		Duration: 40 Hours			
	The objective of this course is to make students understand the fundamental concepts of Data Science, various types of data and ways to handle data in different formats. This course will also help in giving the overview of data mining and data warehousing. Besides this, students will learn and execute exploratory data analysis.				
Course Contents / Syllabus					
UNIT-I	Overview of Data Science	8 Hours			
Introduction to Data Science, Skill sets needed, types of Data Analysis, and technologies, Need for Data Science, Evolution and Future of Data Science. Data Science Tools, Crowd-sourcing analytics, Data Security Issues, Analysis Vs Analytics Vs Reporting. Big Data-Meaning, the 5 V's, Big Data Ecosystem, Applications of Data Science in various fields Use cases -Amazon, Walmart, Airbus, Netflix.					
UNIT-II	Data Handling	8 Hours			
Types of data – structured, unstructured, categorical, numeric, social network data, spatial data. Data Classification, Data Manipulation in different formats.					
UNIT-III	Data Mining	8 Hours			
Meaning, need and forms of Data Pre-processing, understanding and extracting useful variables, KDD Process. Data Cleaning - handling missing data, outliers, Data Integration and Transformation, Data Reduction.					
UNIT-IV	Exploratory Data Analysis	8 Hours			
Principal Component Analysis (PCA), Factor Analysis (FA) and Linear Discriminant Analysis (LDA), Univariate and Multivariate Exploratory Data Analysis.					
UNIT-V	Data Visualisation	8 Hours			
Bar plot, Plotting categorical data, Stacked bar plot, Histogram, plot () function and line plot, pie chart / 3D pie chart, Scatter plot, Box plot, Heat Map, Mosaic Map, Map Visualization, 3D Graphs, Correlogram, Q-Q plots, Visualization of Geospatial Data.					
Course outcome: At the end of course, the student will be able to:					
CO1	Understand the concepts of data science in the business.	Understanding (K2)			
CO2	Identify and analyse the various forms of data and its	Analyse (K4)			

	related concepts.	
CO3	Apply data pre-processing techniques to clean the data.	Apply (K3)
CO4	Analyse and evaluate data using exploratory data analysis.	Evaluate (K5)
CO5	Understand and apply the data visualization techniques.	Apply (K3)
<b>Text books</b>		
<ol style="list-style-type: none"> <li>1. Fan, J., Li, R., Zhang, C. H., &amp; Zou, H. (2020). Statistical foundations of data science. CRC press.</li> <li>2. Van Der Aalst, W. (2016). Process mining: data science in action (Vol. 2). Heidelberg: Springer</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Igual, L., Seguí, S., Igual, L., &amp; Seguí, S. (2017). Introduction to data science (pp. 1-4). Springer International Publishing.</li> <li>2. Cielen, D., &amp; Meysman, A. (2016). Introducing data science: big data, machine learning, and more, using Python tools. Simon and Schuster.</li> <li>3. Kotu, V., &amp; Deshpande, B. (2018). Data science: concepts and practice. Morgan Kaufmann.</li> </ol>		
<b>Links:</b>		
<ol style="list-style-type: none"> <li>1. <a href="https://www.youtube.com/watch?v=X3paOmcTjQ">https://www.youtube.com/watch?v=X3paOmcTjQ</a></li> <li>2. <a href="https://www.youtube.com/watch?v=QiqZliDXCCg">https://www.youtube.com/watch?v=QiqZliDXCCg</a></li> <li>3. <a href="https://www.youtube.com/watch?v=BiGd8y5XB-Y">https://www.youtube.com/watch?v=BiGd8y5XB-Y</a></li> </ol>		

Course Name: MBA Second Year /Semester 3					
Course Code	AMBABA0311	L	T	P	Credit
Course Title	Business Intelligence and Data Warehousing	3	0	0	3
Course Objective: Objective of this course is to:		Duration: 40 Hours			
	The objective of this course is to make students understand the fundamentals of data warehousing and business Intelligence making them able to create dimensional models.				
Course Contents / Syllabus					
<b>UNIT-I</b>	<b>Introduction to BI and Data Warehousing</b>				<b>8 Hours</b>
Definition of Business Intelligence (BI), Evolution of BI, Drivers for BI and DW, BI component Framework and Architectures. Data Warehousing (DW) and Corporate Performance Management (CPM), Need for Warehouse, Role of DSS, EIS, MIS and dashboards.					
<b>UNIT-II</b>	<b>Digital Data</b>				<b>8 Hours</b>
Structured data, Unstructured Data, Managing and storing unstructured data, Storage Challenges of Unstructured Data, Extraction of information from unstructured data, UIM Architecture for unstructured data. Sources of Semi Structured Data. Managing, Storing and extracting information from semi-structured data, XML as a solution for Semi-structured data.					
<b>UNIT-III</b>	<b>OLAP and OLTP</b>				<b>8 Hours</b>
OLTP Advantages, challenges, Shortcomings of OLTP. OLAP, Dimensions of Data -One Dimensional, Two Dimensional and Three-Dimensional Data, Beyond Third Dimension, MOLAP, ROLAP, HOLAP, OLAP versus OLTP, Data Models for OLAP and OLTP, OLAP Operations on multi-dimensional data: Slicing, Dicing, Roll Up, Drill Down, Drill Across, Drill Through.					
<b>UNIT-IV</b>	<b>Data Integration</b>				<b>8 Hours</b>
Data Mart, ODS, Kimball's approach versus Inmon's approach to Data warehousing, Goals of Data Warehouse, Data Sources for Data Warehouse, ETL, Data mapping, data staging, Approaches to Data integration, needs and advantages, Data Integration Technologies, Data Quality, maintaining data quality, Data Profiling.					
<b>UNIT-V</b>	<b>Multi-Dimensional Data Modelling</b>				<b>8 Hours</b>
Entity, Attribute, Cardinality, Conceptual data model, Logical data model, Physical model, Normalization modelling, Dimensional Modelling, Fact Table, Dimension Table, Hierarchies and Types, Star and Snowflake Schema, MS Excel 2010 Based Activity, Performance Management & Enterprise Reporting – Measures, Metrics, KPIs.					
<b>Course outcome:</b>		<b>At the end of course, the student will be able to:</b>			

CO1	Understand the basic concepts of Business Intelligence and Data Warehousing.	Understanding (K2)
CO2	Analyzing the various forms of digital data.	Analyzing (K4)
CO3	Apply the OLTP and OLAP-related concepts.	Applying (K3)
CO4	Apply the data integration approaches in decision-making.	Applying (K3)
CO5	Designing the multi-dimensional model using Excel.	Creating (K6)

**Text books**

1. Collier, K. (2012). Agile analytics: A value-driven approach to business intelligence and data warehousing. Addison-Wesley.
2. Olszak, C. M. (2020). Business intelligence and big data: Drivers of organizational success. CRC press.

**Reference Books**

1. Sabherwal, R., & Becerra-Fernandez, I. (2013). Business intelligence: Practices, technologies, and management. John Wiley & Sons.
2. Dietrich, B. L., Plachy, E. C., & Norton, M. F. (2014). Analytics across the enterprise: How IBM realizes business value from big data and analytics. IBM Press.

**Link**

1. <https://www.sciencedirect.com/science/article/pii/S1672022921001637>
2. <https://www.emerald.com/insight/content/doi/10.1108/EMJB-01-2022-0011/full/html>
3. <https://www.youtube.com/watch?v=IJ1SbMWFpGs>
4. <https://www.youtube.com/watch?v=dRG5JP6zxck>

<b>Course Name: MBA First Year/Semester 3</b>					
<b>Course Code</b>	<b>AMBABA0313</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Predictive Analytics</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>		<b>Duration: 40 Hours</b>			
	The objective of this course is to make students understand the fundamental concepts of predictive analytics and also make student able to make predictive models. This course will enable them to apply predictive analytics techniques.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Overview of Predictive Analytics</b>				<b>6 Hours</b>
Concept of predictive Analytics, Supervised and Unsupervised Learning, Predictive Analytics Vs Business Intelligence, Challenges in using Predictive Analytics, Application of predictive Analytics, CRISP-DM.					
<b>UNIT-II</b>	<b>Data Understanding</b>				<b>7 Hours</b>
Variable understanding- categorical, continuous, flag, Boolean, integer. Mean, median, standard deviation, normal distribution, variable summary, data visualization.					
<b>UNIT-III</b>	<b>Data Preparation</b>				<b>8 Hours</b>
Variable cleaning, Data Audit, Data Cleaning: Missing Values, Noisy Data, Bayesian network. Binning, Clustering, Regression, Inconsistent Data, Data Integration and Transformation.					
<b>UNIT-IV</b>	<b>Modelling and Deployment</b>				<b>8 Hours</b>
Partitioning The Data - Training, Validation & Testing, Model selection- Decision Tree, Logistic Regression, K Nearest Neighbour, Naïve Bayes, SVM, Neural Network. General deployment considerations, Deployment Steps, Case studies.					
<b>UNIT-V</b>	<b>Forecasting and Time Series Analysis</b>				<b>7 Hours</b>
Time Series Analysis, Objectives of Time Series Analysis, Time Series Data, Time Series Patterns. ARMA Processes, Forecasting Stationary Time Series: The Durbin–Levinson Algorithm, The Innovations Algorithm, ARMA Models, Forecasting ARMA Processes. ARIMA Models for Nonstationary Time Series, Forecasting ARIMA Models- The Forecast Function.					

<b>Course outcome: At the end of course, the student will be able to:</b>		
CO1	Understand the concept of predictive analytics.	Understanding (K2)
CO2	Understand and comprehend the data summary.	Applying (K3)
CO3	Apply data preparation techniques.	Applying (K3)
CO4	Develop and deploy a predictive model for a given problem.	Creating (K6)
CO5	Analyze the forecasting and time series analysis functions and models.	Analyze (K4)
<b>Text books</b>		
<ol style="list-style-type: none"> <li>1. Larose, D. T. (2015). Data mining and predictive analytics. John Wiley &amp; Sons.</li> <li>2. Siegel, E. (2013). Predictive analytics: The power to predict who will click, buy, lie, or die. John Wiley &amp; Sons.</li> <li>3. Kuhn, M., &amp; Johnson, K. (2013). Applied predictive modeling (Vol. 26, p. 13). New York: Springer.</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. McCarthy, R. V., McCarthy, M. M., Ceccucci, W., Halawi, L., McCarthy, R. V., McCarthy, M. M., ... &amp; Halawi, L. (2022). Applying predictive analytics (pp. 89-121). Springer International Publishing.</li> <li>2. Miller, T. W. (2015). Modeling techniques in predictive analytics: business problems and solutions with R. Pearson Education.</li> </ol>		
<b>Link</b>		
<ol style="list-style-type: none"> <li>1. <a href="https://www.youtube.com/watch?v=4y6fUC56KPw">https://www.youtube.com/watch?v=4y6fUC56KPw</a></li> <li>2. <a href="https://www.youtube.com/watch?v=reUZRYXxUs4">https://www.youtube.com/watch?v=reUZRYXxUs4</a></li> <li>3. <a href="https://www.youtube.com/watch?v=Q2AFVafpRJA">https://www.youtube.com/watch?v=Q2AFVafpRJA</a></li> <li>4. <a href="https://www.youtube.com/watch?v=yN7ypxC7838">https://www.youtube.com/watch?v=yN7ypxC7838</a></li> </ol>		

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBA0401</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Project Management</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 36 Hours</b>	
1	To empower the students to get insights of basic concepts on project management.				
2	To create awareness on the roles and responsibilities of project manager.				
3	To build the confident among the students to take up any kind of projects.				
4	To sharpen the planning, scheduling and controlling skills of the students with respect to individual projects.				
5	To understand the perspectives in which optimum decisions are to be taken in case of risks with planned activities in project.				
<b>Pre-requisites: Fundamentals of Accounting, and Financial Management</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction of Project</b>				<b>06 Hours</b>
Projects – Definition and Objectives – Project Management Vs General Management – Roles and Responsibilities of Project Manager – Selection of Project Manager – Selection of Projects – Understanding Project Life Cycle. Project Team and Scope of Project Management: Characteristics of a Project Team & Project Leader, Project Organization, and Importance of Project Management. <b>Case Studies</b>					
<b>UNIT-II</b>	<b>Project Identification &amp; Selection</b>				<b>08 Hours</b>
Project Identification & Selection: Identification, Generation of ideas, Approaches to Project Screening and Selection, Project Rating Index. Market & Demand Analysis Techniques: Survey & Trend Projection Methods. Project Risk Management: Concepts and Types of Project Risks, Risk Identification, Risks Analysis, Risks Mitigation Strategies. <b>Case Studies</b>					
<b>UNIT-III</b>	<b>Budgeting the Project</b>				<b>08 Hours</b>
Fundamental components of Project Cost, Types of Costs: Direct, Indirect, Recurring, Non-Recurring, Fixed, Variable, Normal, Expedite costs Methods of budgeting – Project cost estimation – Improving cost estimates – Budget uncertainty and risk management – Scheduling the project – Gantt chart – Resource allocation and loading – Social Cost Benefit Analysis (SCBA) of Project: Concept & significance of SCBA, Approaches to SCBA. <b>Case Studies</b>					
<b>UNIT-IV</b>	<b>Project Scheduling and Network Analysis</b>				<b>08 Hours</b>
Steps in Project Scheduling and Network design, Gantt Chart, Work Breakdown Structure (WBS) & Responsibility Assignment Matrix. Project Network Design: Identifying the Nodes and Activities, Activity on Arrow (AoA) and Activities on Node (AoN) methods, Introduction to PERT and CPM, Crashing in Projects. <b>Case Studies</b>					
<b>UNIT-V</b>	<b>Monitoring and controlling the project</b>				<b>6 Hours</b>
Monitoring the project – Control cycle – Project control – Designing the control system – Evaluation of project: Milestone Analysis and Tracking Gantt chart. Earned Value Analysis (EVA): Planned Value (PV), Earned Value (EV), Cost Variance (CV), Schedule Variance (SV), Cost performance Index (CPI), Schedule performance Index (SPI) – Project auditing – Project termination: Types of Terminations, Project Termination Process. <b>Case Studies</b>					
<b>Course outcome: At the end of course, the student will be able to:</b>					



CO 1	Understand the basic concepts and characteristics of Project and Project manager, management	Understanding (K2)
CO 2	Understand the roles and responsibilities along with tools & techniques used in Project management	Evaluating (K5)
CO 3	Develop confident to take up any kind of projects	Evaluating (K5)
CO 4	Students will understand the scheduling and monitoring process in Project. They will be able to apply PERT and CPM method for project scheduling	Applying (K3)
CO 5	Students will understand the perspectives in which optimum decisions are to be taken in case of risks with planned activities in project	Creating (K6)

### **Text books**

1. Project Management- A Managerial Approach: Jack R. Meredith Broyhill Samuel J. Mantel, Jr (John Wiley & Sons)
2. Samuel J. Mantel, Jr, Jack R. Meredith, Scott M. Shafer, Margaret M. Sutton, M.R. Gopalan, "Project Management – Core Textbook" First Indian Edition (2006), Wiley India publication, 2011.

### **Reference Books**

1. Project- Preparation, Appraisal, Budgeting and Implementation: Chandra Prasanna - (TMH)
2. Clifford Gray, Erik Larson and Gautam Desai, Project Management, The Managerial Process, 4th edition, Tata McGraw Hill 2012
3. Project Management Core Text Book : M R Gopalan (Wiley)
4. Quantitative Techniques in Management : N D Vohra (TMH)

MBA SECOND YEAR					
Course Code	AMBA0459	L	T	P	Credit
Course Title	Research Project Report	0	0	6	3
Course objective: Objective of this project is to:				Duration: 20 Contact Hours	
1	Educate regarding research designs and the research process.				
2	Develop the ability to analyze research reports (from scholarly articles) synthesize key points, cite the conclusions, and format the article's bibliographic citation using correct APA format.				
3	Help the students to develop and present the design of data collection and ability to interpret the data as per the sample collected				
4	Comprehend and apply various statistical tools for data analysis and its interpretation.				
<p><b>Research Project Report (RPR) In fourth semester</b>, the candidates will have to submit a Research Project Report on a problem/topic (from the specialization areas) to be assigned by the MBA department under the supervision of a core faculty member of the department.</p> <ul style="list-style-type: none"> <li>• The Research Project Report will carry <b>200</b> marks.</li> <li>• The evaluation of the project report will be done by <b>two</b> examiners (external &amp; internal).</li> <li>• The evaluation will consist of (1) Evaluation of Project Report (2) Presentation and Viva Voce.</li> <li>• The evaluation of Project Report will comprise of 100 marks and would be evaluated by the internal guide.</li> <li>• The evaluation of Viva Voce of Project would comprise of 100 marks and would be evaluated by two examiners (1 external and 1 internal).</li> </ul> <p>The average of the marks awarded by the 2 examiners during the End Semester Viva voce will be taken into account for the results.</p> <p>The report will contain:</p> <ul style="list-style-type: none"> <li>• The objectives and scope of the study.</li> <li>• Research Methodology,</li> <li>• Use and importance of the study,</li> <li>• Analysis of data collected, Findings and interpretation,</li> <li>• Conclusions and recommendations.</li> <li>• Satisfactory completion of minimum 1 'Research Publication' in a listed Journal is mandatory for award of degree.</li> </ul> <p>It will contain relevant charts, diagrams and bibliography.</p> <p>A certificate of the supervisor and the Head of the MBA program certifying the authenticity of the report shall be attached therewith.</p> <p>The student will submit two copies of the report to the Head of MBA program. The number of pages in the report will be minimum 75 or more. The report should be typed in A-4 size paper.</p> <p>The scheme of evaluation for <b>Research Project Report</b> are as follows:</p> <p><b>Criteria: Internal 100 Marks</b></p> <ul style="list-style-type: none"> <li>• Relevance of Objectives with topic (20)</li> <li>• Relevance of Research Methodology(20)</li> <li>• Interpretation &amp; Analysis (20)</li> <li>• Project Report (20)</li> <li>• Paper Publication in Journal of Repute (20)</li> </ul> <p>The scheme of evaluation of <b>Viva voce</b></p> <p><b>Criteria: External 100 Marks</b></p> <ul style="list-style-type: none"> <li>• Understanding of Objectives with topic (20)</li> <li>• Understanding of the relevance of Research (20)</li> </ul>					

- Interpretation & Analysis (20)
- Presentation & Communication skills (20)
- Query Handling (20)

## REPORT STRUCTURE

Front Page

Undertaking Certificate

Acknowledgement

Abstract

List of Contents

List of Figures

List of Tables

Chapter 1: Introduction- Objective of the study

1.1. Problem Definition

1.2. Overview of the Proposed Approach

1.3. Motivation behind the Proposed Approach

1.4. Organization of the Report

Chapter 2: Literature Review

Chapter 3: Research Methodology

Chapter 4: Data Analysis and Interpretation

Chapter 5: Findings, Recommendation and Conclusion

References

Appendix (Attach Research Paper with front page of the Journal in which it is Published)

**Course outcome: At the end of course, the student will be able**

CO 1	The student will demonstrate cognitive knowledge of research designs and the research process in general.	Understanding (K2)
CO 2	The student will demonstrate the ability to analyze research reports (from scholarly articles) synthesize key points, cite the conclusions, and format the article's bibliographic citation using correct APA format.	Evaluating ( K5)
CO 3	The student will be able to design an original research project, including an instrument for data collection, achieving a level of proficiency according to the assessment rubrics provided for each section of the proposal.	Creating ( K6)
CO 4	The student will be able to defend his project with clarity in presentation and analysis.	Analyze(K4), Creating (K6)

### Text books

1. Malhotra Naresh K.: Marketing Research: An Applied Orientation (Pearson, 7th Edition 2019)
2. Kothari C.R. , Garg Gaurav.: Research Methodology-Methods and Techniques (New Age International)
3. Bryman Alan, Bell Emma, &Harley Bill: Business Research Methods (Oxford University Press)

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAFM0411</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Financial Modeling</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Equip the student with the knowledge of valuation in firm.				
2	Develop the ability to use MS Excel for financial modeling through various formulae				
3	Make the students capable of conducting financial statement analysis independently.				
4	Develop the ability for assessing and forecasting project requirement and conducting ratio analysis				
5	Conduct the equity research modeling for investment				
<b>Pre-requisites:</b> Knowledge of Financial statement analysis, Basic MS-Excel, Financial markets					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Valuation</b>				<b>Hours: 8</b>
Valuation & its importance, Understanding enterprise value and equity value, Comparable Company Analysis, Precedent Transactions Analysis: Selecting comparable transactions, Spreading comparable transactions, Discounted Cash Flow (DCF) analysis: Understanding unlevered free cash flow, Forecasting free cash flow, Forecasting terminal value, Present value and discounting					
<b>UNIT-II</b>	<b>Basic Excel for Financial Modeling</b>				<b>Hours: 8</b>
Formatting of Excel Sheets, Use of Excel Formula Function, Data Filter and Sort, Charts and Graphs, Table formula and Scenario building, Lookups: Vlookup Match & offset, pivot tables. Portfolio Models, Matrix Operations and Data Tables.					
<b>UNIT-III</b>	<b>Financial Statement Analysis</b>				<b>Hours: 8</b>
Introduction to Financial Statement Analysis Financial Reporting Mechanics, Projecting the income statement, Projecting the balance sheet, Projecting the cash flow statement, Creating the debt and interest schedule, Revolver modeling, Financial Statement Application					
<b>UNIT-IV</b>	<b>Financial Ratios &amp; Project Finance</b>				<b>Hours: 8</b>
Ratio analysis of industries, Dupont Analysis, Peer to peer analysis, Preparation of Financial Analysis report on an industry. Project evaluation; stage of project; construction & development phase; funding & costs during investment phase; Cash flow waterfall					
<b>UNIT-V</b>	<b>Equity Research Modeling</b>				<b>Hours: 8</b>
Introduction to Equity Analysis & Investing Evaluating Business Model & Industry Analysis, PE Analysis, Sensitivity Analysis, Screening Stocks for investment: Cloning & Filters, Impact of corporate actions on financials, Psychology of Investment.					
<b>Course outcome: At the end of course, the student will be able to:</b>					
CO 1	Understand and apply relevant technique for the relative valuation of the firms.			Understand (K1), Apply (K3)	
CO 2	Apply the MS Excel tools for financial modeling and valuation.			Apply (K3)	
CO 3	Understand & Apply various approaches of financial statement analysis.			Apply (K3)	

CO 4	Project & evaluate the requirements in managing the projects.	Analyse (K4), Evaluate (K6)
CO 5	Apply & use various tools and models for equity research.	Apply (K3)
<b>Text books</b>		
1.	Sengupta C, Financial Analysis and Modeling using Excel and VBA, Wiley, 2nd Ed	
2.	Thomas S Y Ho & Sang Bin Lee, The Oxford Guide to Financial Modeling: Applications for Capital Markets, Corporate Finance, Risk Management and Financial Institutions, Oxford University Press	
<b>Reference Books</b>		
2.	Bodmer E, Corporate and Project Finance Modeling: Theory and Practice (Wiley Finance)	
3.	Swan J, Practical Financial Modelling: The Development and Audit of Cash Flow Models, Butterworth-Heinemann, 3 <sup>rd</sup> Ed	

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAFM0412</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Working Capital Management</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Have a basic understanding of working capital and assessing its requirement.				
2	Learn how to manage cash and other liquid assets.				
3	Learn and apply efficient techniques to manage and utilize the inventories.				
4	Develop a clear understanding and practicing regarding receivables of the organization.				
5	Make the student equip with the knowledge of financing the working capital from different financing sources.				
<b>Pre-requisites:</b> Student should have knowledge of accounting and financial management					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Working Capital</b>				<b>Hours:8</b>
Nature, Scope and Definition of Working Capital, Types of working Capital, Determinants of working capital , Working Capital Cycle, Assessment an Computation of Working Capital Requirement, Profitability–Liquidity trade-off, Working Capital Policy - Aggressive & Defensive. Overview of Working Capital Management					
<b>UNIT-II</b>	<b>Cash &amp; Marketable Securities Management</b>				<b>Hours:8</b>
Meaning of Cash, Motives for holding cash, objectives of cash management, factors determining cash needs, Cash Management Models, Cash Budget, Cash Management: basic strategies, techniques and processes, Lock Box system and concentration banking, compensating balances ; Marketable Securities: Concept, types, reasons for holding marketable securities, alternative strategies, choice of securities; Cash Management Practices in India.					
<b>UNIT-III</b>	<b>Receivables Management</b>				<b>Hours:8</b>
Receivables: Nature & cost of maintaining receivables, objectives of receivables management, factors affecting size of receivables, policies for managing accounts receivables, determination of potential credit policy including credit analysis, credit standards, credit period, credit terms, etc; Collection Policies; Credit Management in India.					
<b>UNIT-IV</b>	<b>Inventory Management</b>				<b>Hours:8</b>
Inventory: Need for monitoring & control of inventories, objectives of inventory management, Benefits of holding inventory, risks and costs associated with inventories, Inventory Management: Minimizing cost in inventory, Techniques of Inventory Management - Classification, Economic order quantity, ABC Analysis, VED etc.					
<b>UNIT-V</b>	<b>Financing of Working Capital</b>				<b>Hours:8</b>
Need and objectives of financing of working capital, short term credit, mechanism and cost-benefit analysis of alternative strategies for financing working capital : accrued wages and taxes, accounts payable, trade credit, bank loans, overdrafts, bill discounting, commercial papers, certificates of deposit, factoring, secured term loans, etc; Pattern and sources of Working Capital Financing in India with reference to Government policies, working capital control and banking policy- prominent committees on working capital financing.					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO 1	Assess and analyze the working capital requirement of the firm.	Analyse (K4)
CO 2	Apply the techniques for managing cash and liquid assets of the firm.	Apply (K3)
CO 3	Plan and channelize the inventories in right quantity and at right time.	Analyse (K4)
CO 4	Apply the techniques of receivables management in order to enhance the cash position of the firm.	Apply (K3)
CO 5	Procure the funds for meeting the working capital needs of the firm.	Analyse (K4)
<b>Text books</b>		
1.	Rustagi R P, Working Capital Management, Taxmann	
2.	Bhalla V.K - Working Capital management, Text and cases, Anmol Publication, Delhi , 11th edition	
<b>Reference Books</b>		
1.	Bhattacharya H, Working Capital Management, PHI, 3 <sup>rd</sup> Ed.	
2.	Rangrajan K, Misra A.; Working Capital Management, Excel Books	
3.	Sagner J, Working Capital Management: Applications and Case Studies, Wiley Publication	

## MBA SECOND YEAR

<b>Course Code</b>	<b>AMBAFM0413</b>	<b>L</b>	<b>T</b>	<b>P</b>		<b>Credit</b>
<b>Course Title</b>	<b>Financial Derivatives &amp; Risk Management</b>	<b>3</b>	<b>1</b>	<b>0</b>		<b>4</b>
<b>Course objective: Objective of this course is</b>					<b>Duration: 40 Hours</b>	
1	To aware the students of different types of Derivatives.					
2	To develop an understanding amongst students of financial derivatives and associated regulatory framework.					
3	To have an understanding of the derivative tools such as options, futures and their application to hedging.					
4	To understand the concept of risk management					
<b>Pre-requisites:</b> Required Basic Knowledge for Financial Derivatives & Risk Management						
<b>Course Contents / Syllabus</b>						
<b>UNIT-I</b>	<b>Introduction to Financial Derivatives</b>					<b>Hours:8</b>
Definition, Evolution and features of Derivatives, Types of Derivatives, Forward , futures and options market, Forward market transactions , Forward contracts , Forward market in India , Hedging with forwards.						
<b>UNIT-II</b>	<b>Forwards Contracts and Futures Contracts</b>					<b>Hours:8</b>
Forward Contract, features of forward contracts Futures contract , types , functions , distinction between futures and forward , pricing of futures contract, Currency Futures , Hedging in Currency Futures , Speculation and Arbitrage in Currency Futures , Pricing of Futures, Cost of Carry Model , Application of Market Index , Index Futures in the Stock Market , Indian Derivatives Market.						
<b>UNIT-III</b>	<b>Introduction to Options</b>					<b>Hours:8</b>
Hedging with Currency Options , Speculation and Arbitrage with Options ,Pricing Options , General Principles of Pricing , Black Scholes option pricing Model Index Options , Hedging with Index Options, Speculation and Arbitrage with Index Options, Index Options Market in Indian Stock Market , Use of different option strategies to mitigate the risk.						
<b>UNIT-IV</b>	<b>Financial Swaps</b>					<b>Hours:8</b>
Financial Swaps, Managing Interest Rate Exposure, Interest Rate Swaps, Currency Swaps Interest Rate Futures, Forward Rate Agreements.						
<b>UNIT-V</b>	<b>Risk Management</b>					<b>Hours:8</b>
Risk Management:Definition, meaning and measurement of Risk- Classification of Risk- diversification- Statistical tools used in risk management - techniques of risk mitigation						
<b>Course outcome: At the end of course, the student will</b>						
CO 1	Understand how derivative securities work and how they are traded.					Knowledge (K2)
CO 2	Understand the principles of derivatives pricing, including the implications of arbitrage.					Evaluating (K7)
CO 3	Be able to know the price forward and futures contracts using the cost of carry model.					Synthesizing (K6)
CO 4	Be able to value options using the binomial and Black-Scholes option pricing models.					Applying (K4)



CO 5	Be prepared to use futures and options in financial risk management, speculation and arbitrage, interest future and forward rate agreement.	Synthesizing (K6)
<b>Text books</b>		
<ol style="list-style-type: none"> <li>1. Thomas Susan, Derivatives Market in India; Tata McGraw Hill</li> <li>2. Financial Derivatives: Theory, Concepts and Practices by S.L. Gupta, PHI, 2005.</li> <li>3. Financial Derivatives by S.S.S Kumar, PHI , 2007</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Options, Futures and other Derivatives, John C. Hull; Prentice Hall of India; New Delhi, 1997.</li> <li>2. Chance, D.M., &amp; Brooks, R. (2008). Derivatives and Risk Management Basics. Cengage Learning India.</li> <li>3. Bhalla, V.K. (2012). Investment Management. New Delhi: Sultan Chand.</li> </ol>		

## MBA SECOND YEAR

<b>Course Code</b>	<b>AMBAHR0411</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Talent Management</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration:40 Hours</b>	
1	Provide insights to the process of attraction, acquisition, and retention of talent in Organizations.				
2	Develop a clear understanding of talent management and its linkage with organizational strategy and other HR practices.				
3	Provide the understanding of acquiring and retaining the talent in the organization.				
4	Provide them the process of identifying and developing the potential talent to fulfill the present and future need of the organization.				
5	Cover the emerging trends in Talent management such as HR Accounting, HR Audits.				
<b>Pre-requisites: Basics of HRM</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Talent Management</b>				<b>8 Hours</b>
Introduction to Talent Management: Concept , Meaning & Objectives, Role of Talent Management in building Sustainable Competitive Advantage to a firm; Key Processes of Talent Management: Recruitment, Selection, Human Resource Planning, Retention, Talent vs. Knowledge, Consequences of Failure in Managing Talent, Identifying and Assessing High-Potential Talent: Current Organizational Practices .Case Studies					
<b>UNIT-II</b>	<b>Talent Acquisition</b>				<b>8 Hours</b>
Talent Acquisition: Job Analysis, Developing job Description & Job Specification, Attracting and Recruiting the best Talents, Strategic Trends in Talent Acquisition, Talent acquisition management solutions. HR Planning for Talent Management: Process (using MS-Excel and quantitative tools), Evaluation of factors affecting HR Planning, Strategic view of Recruitment & Selection. Case Studies					
<b>UNIT-III</b>	<b>Strategic Recruitment and Selection</b>				<b>8 Hours</b>
Recruitment and Selection Process: Introduction, Sources of Recruitment, Use of Assessment Centers, Selection Errors & Minimizing Selection Errors, Reliability & Validity of Selection Tests, Formulating a recruitment strategy for senior level executives. Talent Development: Need Analysis, Knowledge Management, Stress Management, Competency Development, Developing Leadership Talent and Emotional Capabilities. Case Studies					
<b>UNIT-IV</b>	<b>Employee Retention</b>				<b>8 Hours</b>
Employee Retention: Comprehensive approach to Employees Retention, Managing Voluntary Turnover, Dealing with Job Withdrawal; Strategic Compensation plan for Talent Engagement: Defining the Elements of Total Rewards, Integrated Rewards Philosophy, Designing Integrated Rewards, Sustainable Talent Management and Reward Model, Career and Succession Planning. Employee Engagement: Process and outcomes of Employee Engagement, Ways of Achieving Employee Engagement Case Studies					
<b>UNIT-V</b>	<b>Emerging Trends in SHRM</b>				<b>8 Hours</b>
Emerging Trends in HR: Human Resource Audits, Human Resource Information System (HRIS), Human Resource Accounting (HRA), Business Process Re-engineering, Contemporary Talent Management Issues and Challenges. Case Studies					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO 1	Knowledge of Talent Management Processes	(Understand) K2
CO 2	Analyse the impacts of Talent management in the organization	(Analyze) K4
CO 3	Competency to implement Talent Management practices	(Evaluate) K5
CO 4	Competency to develop leadership qualities among subordinate	(Evaluate) K5
CO 5	Knowledge about the reward system to support Talent management	(Apply) K3

**Text books**

1. Rob Silzer (Editor), Ben E. Dowell (Editor), Strategy-Driven Talent Management: A Leadership Imperative, Wiley., 2009.
2. Gowri Joshi & Veena Vohra, Talent Management, Cengage Learning ,2017.

**Reference Books**

1. Dessler Gary, Varkkey Biju, Fundamentals of Human Resource Management, Pearson Publication, 16th Edition, 2020.
2. Lance A Berger, Dorothy R Berger, Talent Management Hand Book, McGraw Hill 2017.
3. Collings, Mellahi, Casicio, The Oxford Handbook of Talent Management, Oxford University Press, 2017

<b>MBA SECOND YEAR</b>				
<b>Course Code</b>	<b>AMBAHR0412</b>	<b>L</b>	<b>T P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Strategic Human Resource Management</b>	<b>3</b>	<b>1 0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>			<b>Duration: 40 Hours</b>	
1	Understand the link between firm strategy and HR practices of the firm through Sustained Competitive Advantage.			
2	Understand the need for different HRM practices in alignment with different business strategies.			
3	Acquaint the students with the tools & techniques essential as a strategic contribution of HRM to organizational growth.			
4	Understand different ways in which HRM can be strategically pursued within organisations and its links with organisational performance.			
5	Understand the impact of HRM practices in global environment.			
<b>Pre-requisites: Basics of HRM</b>				
<b>Course Contents / Syllabus</b>				
<b>UNIT-I</b>	<b>Introduction to SHRM</b>			<b>8 Hours</b>
Conceptual Framework & Context of SHRM, Impacts of Globalization on HRM ,Changing Nature of Workforce, Development of SHRM, Models of Strategic HRM ,Workforce Diversity, Demographic changes, Challenges in Strategic Human Resource Management ,Impacts of Strategic HRM, SHRM for Competitive Advantage .				
<b>UNIT-II</b>	<b>Implementation of SHRM</b>			<b>8 Hours</b>
Implementation of Strategic HRM: Staffing, Training & Development, Strategic Options of Human Resource Development, Impacts of SHRM on Performance , Practicalities in Measuring SHRM Outcomes, Strategic Oriented Compensation System ,and Employee Separation .				
<b>UNIT-III</b>	<b>HR Strategy and Employee Engagement</b>			<b>8 Hours</b>
HR Strategy, Components of Strategic HRM, Organizational HR strategies, Functional HR strategies ,Strategic HRM in Action ,Improving Business Performance through Strategic HRM. Employee Engagement and Drivers of Engagement Learning Organizations and Organizational Learning .				
<b>UNIT-IV</b>	<b>Strategic Knowledge Management</b>			<b>8 Hours</b>
Strategic Knowledge Management, Building Knowledge Management into Strategy Framework, Knowledge Sharing as a Core Competency ,HR Dimension to Knowledge Management, Strategic Approach to Industrial Relations, Outsourcing & its HR implications, Human Side of Mergers and Acquisitions three-stage model of M&A.				
<b>UNIT-V</b>	<b>Global HRM Practices</b>			<b>8 Hours</b>
Global human resource management, Difference between global HRM domestic HRM; Strategic HR issues in Global Assignments, Expatriates selection & Repatriation, Building a Multicultural Organization, Investment perspectives of HR, Strategic Choice ,Leadership Strategic issues in International Assignment .				
<b>Course outcome: At the end of course, the student will be able to</b>				
CO 1	Understand the dimensions of Strategic HRM.		(Understand) K2	

CO 2	Apply the learning of SHRM in organizational context.	(Apply) K3
CO 3	Evaluate the impacts of SHRM on competitive advantages	(Evaluate) K5
CO 4	Have desired level of expertise on organizational knowledge management through SHRM.	(Evaluate) K5
CO 5	Understand the International culture in SHRM.	(Understand) K2

**Text books**

1. Jeffrey A. Mello, Strategic Human Resource Management, Cengage Learning, 2019
2. Charles R Geer, Strategic Human Resource Management: A General Managerial Approach, 2e, Pearson India, 2002.

**Reference Books**

1. Armstrong, Michael & Baron Angela, Handbook of Strategic HRM, (Jaico Publishing House), 2005.
2. Gary Rees Smith Paul, Strategic Human Resource Management: An International Perspective, Sage Publications, 2019.
3. Richard Regis, Strategic Human Resource Management and Development, Pearson, 2008.

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAHR0413</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Diversity of Workforce (IHRM)</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration:40 Hours</b>	
1	Familiarize the students with HR management in Global perspective.				
2	Understand the complexity of workforce diversity in international context.				
3	Make the students aware of the international labor relations.				
4	Develop an understanding of expatriate's recruitment & training programs.				
<b>Pre-requisites: Basics of HRM</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>		<b>Introduction to IHRM</b>			<b>8 Hours</b>
International Human Resource Management-Overview, Developments leading to International HRM Perspectives, International Human Resource Management: Role and Distinguishing Activities, Organisational Structure and HRM, International Human Resource Planning. Case Studies					
<b>UNIT-II</b>		<b>Staffing &amp; Compensation Practices in Global Context</b>			<b>8 Hours</b>
Staffing Practices in International Human Resource Management, Recruitment and Selection for Overseas Assignments, Global Staffing Practices, International Transfers and Repatriation Strategies, Training and Development in International Context, International Performance Management, Global Compensation Practices. Case Studies.					
<b>UNIT-III</b>		<b>Industrial Relations and Labour Standards in IHRM</b>			<b>8 Hours</b>
Industrial Relations and International Practices in Industrial Relations, Shifts in IHRM and IR, International Strategic Human Resource Management, International Labour Standards, Global Unions, Regional Integration and Framework Agreements. Case Studies.					
<b>UNIT-IV</b>		<b>Diversity Management in Global Context</b>			<b>8 Hours</b>
Equal Opportunity and Diversity Management in Global Context. Sensitivity to Cultural Diversity, Global Organisation Structures, Emerging Trends in Employee Relations and Employee Involvement, Convergence or divergence in personnel management in developed and developing economies, Case Studies					
<b>UNIT-V</b>		<b>Trends &amp; Issues In IHRM</b>			<b>8 Hours</b>
Emerging Trends in International HRM, HR/IR issues in MNCs and Corporate Social Responsibility, Case Studies					
<b>Course outcome: At the end of course, the student will be able</b>					
CO1	Understanding the Contexts of International HRM			(Understand) K2	
CO2	Knowledge about the HR Processes in International Context			(Understand) K2	
CO 3	Able to evaluate the impacts of Globalisation on HRM			(Evaluate) K5	
CO4	Desired level of expertise on organizational Issues.			(Evaluate) K5	
CO5	Understanding and applying the International culture in IHRM			(Apply) K3	
<b>Text books</b>					
1. Peter J. Dowling, Marion Festing , Allen D. Engle, International Human Resource Management,Cengage,2017					
2. Aswathappa , K. and Sadhana Dash , International Human Resource Management, McGraw Hill Education,2020,3 <sup>rd</sup> Edition.					
<b>Reference Books</b>					
1. Harzing, Pinnington , International Human Resource Management ,Sage Publication,2017.					
2. P L Rao ,International Human Resource Management (Excel Books),2008.					
3. Tayeb, International Human Resource Management,Oxford ,2007					

## MBA SECOND YEAR

<b>Course Code</b>	<b>AMBAMK0411</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Sales and Retail Management</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration:40 Hours</b>	
1	To build knowledge, understanding, and skills in Sales and Retail Management.				
2	Enable development and implementation of Sales and Retail Management strategies.				
3	Help to analyze decision alternatives and criteria in the context of realistic problem situations in Sales and Retail Management.				
4	To acquaint the students with both store and non-store retailing.				
5	To build knowledge about retail growth strategies.				
<b>Pre-requisites:</b> Having an understanding of Basics of Sales and retail management.					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction of Sales</b>				<b>08 Hours</b>
Introduction to Sales: Role of selling in marketing, Personal selling, Salesmanship and sales manager, Types of sales personnel, Characteristics of a successful salesman, Theories of selling, Sales management, Process of effective selling.					
<b>UNIT -2</b>	<b>Building Sales Organization</b>				<b>08 Hours</b>
Building Sales Organization: Types of sales organizations and their structure, Functions and responsibilities of sales person, filling sales positions, Recruitment, Selection, Training and Development, Development and Conducting Sales training programme.					
<b>UNIT-3</b>	<b>Leading Sales Organization</b>				<b>08 Hours</b>
Leading Sales Organization: Sales force motivation, Designing & Administering, Sales force compensation plans, Designing incentives and contests, Sales forecasting, Sales budget, Sales quota, Sales territory, Building sales reporting mechanism and monitoring, Sales force productivity, Sales force appraisal.					
<b>UNIT-4</b>	<b>Introduction to retailing</b>				<b>08 Hours</b>
Introduction, Meaning of Retailing, Economic Significance of Retailing, Product Retailing vs. Service Retailing, evolution of retailing- global retailing scenario- Indian retail –emerging trends in retailing in India. Types of Retailers: Classification by Ownership – Independent Store, Chain stores, Franchise Stores, leased Departments, Cooperatives; Classification by Strategy – General Merchandise Retailers, Discount Stores, Specialty Stores, Off Price Retailers; Classification by Product Line – Department stores, Supermarkets, Hypermarkets, Convenience Stores, Services retailing.					
<b>UNIT-5</b>	<b>Retail Market Strategy</b>				<b>08 Hours</b>
Retail Marketing Strategy: differentiation, growth strategy, strategic retail planning process. Retail Location & site selection Strategy: Types of retail locations, Steps involved in choosing a retail location, Methods of evaluating a trading area. Retail store layout & visual merchandising: Store planning, Store Design and the retailing mix, Space mix, effective space management, Store layout – circulation plan, Floor Space management. Markups and Markdowns, Shrinkage in merchandise management					
<b>Course outcome: At the end of course, the student will be able to:</b>					
CO1	Students will develop knowledge, understanding and skills in Sales force				(Understand) K2

	management.	
CO2	Acquainted with better understanding of implementation of sales management strategies.	(Analyse) K4
CO3	Develop analytical skills for effective decision alternatives in sales management problems	(Create) K6
CO4	Develop the knowledge, understanding and skills in retail management and how to manage Store and non-store retailing.	(Apply) K3
CO5	Understand how to develop marketing mix strategies for retail business.	(Analyse) K4

**Text Books**

1. Tapan Panda: Sales and Distribution Management, 3 Ed, OUP.
2. Havaladar, K.K., and Cavale, V.M.; Sales and Distribution Management; McGraw Hill Education
3. Pradhan Swapna; Retailing Management; 5e, McGraw-Hill Education
- 4 Spiro, R.L., Stanton, W.J. and Rich, G.A.; Management of Sales Force; McGraw-Hill Education
5. Berman, Evans, Chatterjee; Retail Management Strategic approach; 13e, Pearson

**Reference Books:**

1. Panda, T.K., and Sahdev, S.; Sales and Distribution Management; Oxford Univ Press
2. P. K. Sinha & D. P. Uniyal, : Managing Retailing, Oxford University Press.
3. Still, R.R., Cundiff, E.W. and Govani, N.A.P.; Sales Management; Pearson Education
4. Coughlan, A. T., Anderson, E., Stern, L. W. and El-Ansary, A. I.; Marketing Channels; Pearson Education
5. Futrell, C.M.; Sales Management; Cengage Learning
6. Rosenbloom, B.; Marketing Channels; Cengage Learning
1. Retailing Management by Michael Levy & Barton Weitz, Tata McGraw Hill, 5th Edition.
2. Retailing Management by Swapna Pradhan, Tata McGraw Hill.

**Web resources:**

1. [http://www.cci.in/pdf/surveys reports/indiasretailsector.pdf](http://www.cci.in/pdf/surveys%20reports/indiasretailsector.pdf)
2. <http://www.indiaretailing.com>



<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAMK0412</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Marketing Analytics</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40</b>	
1	Understand the basic concepts of Marketing Analytics				
2	Study various tools to have marketing insights in various marketing areas through empirical data				
3	Interpret the marketing data for effective marketing decision making				
4	To draw inferences from data in order to answer descriptive, predictive, and prescriptive questions relevant to marketing managers				
5	Enable students to use forecasting methods for decision making				
<b>Pre-requisites: Basic of Statistics and Marketing</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Marketing Analytics</b>				<b>08 Hours</b>
Meaning, characteristics, advantages and disadvantages of marketing analytics, Market data sources (Primary and Secondary). The new realities of marketing decision making Market Sizing: Data sources, Stakeholders, Applications & Approaches (Top-down and Bottom-up)					
<b>UNIT-II</b>	<b>Pricing Analytics</b>				<b>08 Hours</b>
Estimating Demand Curve: Estimating Linear and Power Demand Curves, Optimize Pricing, Incorporating Complementary Products, Using Pricing subjectively to estimate Demand Curves, Pricing Multiple Products, Price Bundling & Nonlinear Pricing: Pure Bundling & Mixed Bundling, Determine Optimal Bundling Pricing, Profit Maximizing strategies using Nonlinear Pricing Strategies, Price Skimming & Sales					
<b>UNIT-III</b>	<b>Customer Analytics</b>				<b>10 Hours</b>
Segmentation and Targeting: The segmentation-targeting-positioning (STP) framework, Segmentation, The concept of market segmentation, Managing the segmentation process, Deriving market segments and describing the segments -Cluster analysis, Discriminant analysis, Targeting, The concept of product positioning, Conducting a positioning study, Perceptual mapping using principal components analysis, Incorporating preferences into perceptual maps. Customer Lifetime Value: Concept, Basic Customer Value, Measuring Customer Lifetime value, Estimating Chance that customer is still active, Using Customer Value to value a business					
<b>UNIT-IV</b>	<b>Retailing and Advertising Analytics</b>				<b>6 Hours</b>
Market Basket analysis: Computing two way and three way lift Allocating Retail Space and Sales Resources: Identifying the sales to marketing effort relationship & its modeling, optimizing sales effort Advertising Analysis: Measuring the Effectiveness of Advertising, Optimizing advertising, Pay per Click (PPC) Online Advertising					
<b>UNIT-V</b>	<b>Sales Forecasting &amp; Conjoint Analysis</b>				<b>08 Hours</b>
Regression model to forecast sales, Modeling trend and seasonality; Ratio to moving average forecasting method, Using S curves to Forecast Sales of a New Product Conjoint analysis: Conjoint analysis as a decompositional preference model, Steps in conjoint analysis, Uses of conjoint analysis.					
<b>Course outcome: At the end of course, the student will be able to:</b>					
CO 1	Understand basic concepts of marketing analytics.				Understanding (K2)

CO 2	Analyze the effects of pricing analytics on business decisions	Analyze (K4)
CO 3	Understand and apply customers analytics for marketing decisions	Analyze (K4)
CO 4	Understand retailing and advertising analytics	Understanding (K2)
CO 5	Understand and apply forecasting methods for decision making	Analyze (K4)

**Text books**

1. Marketing Analytics: Data-Driven Techniques with Microsoft Excel by Wayne L Winston © 2014 Wiley India Pvt. Ltd.
2. Marketing Analytics: Strategic Models and Metrics by Stephan Sorger© 2013 Create Space Publishing

**Reference Books**

1. Marketing Engineering and Analytics by Gary Lilen, Arvind Rangaswamy, and Arnaud De Bruyn© 2017 Decision Pro, Inc.
2. Fundamentals of Business Analytics by R N Prasad and Seems Acharya, Wiley Publisher
3. Marketing Analytics by Moutusy Maity and Pavan Kumar Gurazada, Oxford Higher Education
4. Digital Marketing Analytics by Chuck Hemann and Ken Burbary, Pearson Education

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBAMK0413</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Marketing of Services</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
1	Develop an understanding of the basic concepts and issues in service marketing.				
2	Build a working service marketing vocabulary so as to understand and discuss marketing concepts in business settings.				
3	Learn about key characteristics of service and service processes, customer service experiences, the role of internal stakeholders in service delivery, and organizational challenges of managing service.				
4	Strengthen the ability to justify and support decisions through information Acquisition and management.				
5	Provide an understanding of how service customers determine value in a service exchange and how this translates into a satisfied customer base.				
<b>Pre-requisites: Having an understanding of Basics of marketing concepts and its models.</b>					
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction To Services Marketing</b>				<b>08 Hours</b>
Introduction To Services Marketing. Introduction: Definition, Characteristics and Classification of Services, Difference between Product and Services Marketing, Paradigms in Services Marketing, Present Marketing Environment; Services Marketing Mix: Understanding the 7 P's, Strategies for Services Marketing: Segmentation, Targeting & Positioning, Differentiation.					
<b>UNIT-II</b>	<b>Understanding Consumer Behavior and Service</b>				<b>08 Hours</b>
Understanding Consumer Behavior and Service Design Understanding Consumer Behavior: Services vis-à-vis goods, Consumer Behavior in Services, Customer Expectations and Perceptions of Services – Evaluation of services. Service Development Design & Standards: New Service Development Process – Basic service to potential service, Customer Defined Service Standards, Demand and Capacity Management.					
<b>UNIT-III</b>	<b>Delivering, Pricing and Managing Service Promise</b>				<b>08 Hours</b>
Delivering, Pricing and Managing Service Promise, Delivering Services: Role of Employees and Customers in service delivery; Service Product and Operation, Role of Employees and Customers in Service Delivery, Pricing of Services , Promotions and Services capes in Services Role of Intermediaries, Service process – Blue printing – Physical evidence. Pricing of Services: Pricing Considerations and Strategies.					
<b>UNIT-IV</b>	<b>Service Performance</b>				<b>08 Hours</b>
Service Performance. Evaluating Success of Service Offering: Service quality and measurement, Complaint handling, Recovery management, Service Guarantees. Role of CRM, the Gaps Model of Service Quality.					
<b>UNIT-V</b>	<b>Overview Of Current Trends In Service Industries</b>				<b>08 Hours</b>
Overview Of Current Trends In Service Industries, Understanding of Current Trends in Service Industries: Financial, Hospitality, Health, Telecom, Consultancy, Logistics, Education, NGO, Public Utilities, ITES (IT enabled Services), Travel & Tourism, e-Services and Professional Services.					
<b>Course outcome: At the end of course, the student will be able TO:</b>					
CO 1	Understand and explain the nature and scope of services marketing				Understand (K2)
CO 2	Use critical analysis to service excellence; perceive service shortcomings in				Create (K3)

	reference to ingredients to create	
CO 3	Be able to identify critical issues related to service design, such as identifying and managing customer service experience, expectations, perceptions	Apply (K4)
CO 4	Provide a theoretical and practical basis for assessing service performance using company	Apply (K3)
CO 5	Identify and discuss characteristics and challenges of managing service firms in the modern world	Apply (K2)

**Text books**

1. Services Marketing Text and Cases, Vinnie Jauhari & Kirti Dutta, Oxford University Press.
2. Services Marketing, Zeithaml Valerie and Mary Jo Bitner, Gremler & Pandit, Tata McGraw Hill.

**Reference Books**

1. Services Marketing, Lovelock, Christopher. Prentice Hall.
2. Services Marketing, Nargundkar, Rajendra. Tata McGraw Hill
3. The Essence of Services Marketing, Adrian Payne.PHI.
4. Services Marketing, Ravi Shankar. ExcelPublishing

MBA SECOND YEAR							
Course Code	AMBABI0411			L	T	P	Credit
Course Title	Cyber Security			3	1	0	4
Course objective: Objective of this course is to:				Duration:40 Hours			
1	Understand various types of threats to information system.						
2	Learn threats and risks within context of the cyber security.						
3	Have an overview of cyber laws						
4	Understand different types of ethical hacking .						
Course Contents / Syllabus							
UNIT-I	Introduction to Cyber Security			8 Hours			
<b>Introduction :</b> Introduction to information systems, Types of information Systems, Development of Information Systems, Introduction to information security, Need for Information security, Threats to Information Systems, Information Assurance, Cyber Security, and Security Risk Analysis.							
UNIT-II	Security Threat Management			8 Hours			
<b>Application security</b> (Database, E-mail and Internet), Data Security Considerations-Backups, Archival Storage and Disposal of Data, Security Technology-Firewall and VPNs, Intrusion Detection, Access Control. <b>Security Threats</b> -Viruses, Worms, Trojan Horse, Bombs, Trapdoors, Spoofs, E-mail viruses, Macro viruses, Malicious Software, Network and Denial of Services Attack, Security Threats to E-Commerce-Electronic Payment System, e- Cash, Credit/Debit Cards. Digital Signature, public Key Cryptography.							
UNIT-III	Security Elements			8 Hours			
<b>Security Elements:</b> Authorization and Authentication - types, policies and techniques – Security certification , Security monitoring and Auditing - Security Requirements Specifications – Security Policies and Procedures, Firewalls, IDS, Log Files, Honey Pots. Developing Secure Information Systems, Application Development Security, Information Security Governance & Risk Management, Security Architecture & Design Security Issues in Hardware, Data Storage & Downloadable Devices, Physical Security of IT Assets, Access Control, CCTV and intrusion Detection Systems, Backup Security Measures.							
UNIT-IV	Security Policies			8 Hours			
<b>Security Policies:</b> Why Policies should be developed, WWW policies, Email Security policies, Policy Review Process-Corporate policies-Sample Security Policies, Publishing and Notification Requirement of the Policies. <b>Information Security Standards</b> -ISO, IT Act, Copyright Act, Patent Law, IPR. Cyber Laws in India; IT Act 2000 Provisions, Intellectual Property Law: Copy Right Law, Software License, Semiconductor Law and Patent Law. Recent amendments by the IT (Amendment Act) 2008, Act Section 66 (A, B, C, D, E, F), IT ActSection67(A,B,C) , IPR Issues:, Copyright Issues in Cyberspace, Trademark Issues in Cyberspace, Patent Issues , industrial design, Geographical indications, Plant Varieties, Information Technology and Cyber Crimes.							
UNIT-V	Ethical Hacking			8 Hours			

Ethical Hacking: Introduction, Networking & Basics, Foot Printing, Google Hacking, Scanning, Windows Hacking, Linux Hacking, Denial of Service, Sniffer, Social Engineering, Wireless Hacking, Firewall & Honey Pots, Cryptography, IDS & IPS, Penetration Testing, Session Hijacking, Hacking Web Servers, Reverse Engineering, Email Hacking, Incident Handling & Response, Bluetooth Hacking, Mobile Phone Hacking Basic ethical hacking tools and usage of these tools in a professional environment.

**Course outcome: At the end of course, the student will be able to:**

CO 1	Understand the cyber security needs of an organization	(Understand) K2
CO 2	Understand different types of security threats and their impact into to e - commerce	(Understand) K2
CO 3	Understand security policies and protocols to implement such policies.	(Apply) K3
CO 4	Apply policies and procedures and cyber laws to manage Privacy Issues.	(Analyze) K4
CO 5	Understand different types of ethical hacking and their impact in real world.	(Apply) K3

**Text books**

1. NimaGodbole and SunitBelpure , Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives, Wiley- India
2. B. B. Gupta ,D.P.Agrawal , Haoxing Wang. Computer and Cyber Security : Principles, Algorithm , Applications and Perspectives, CRC Press, ISBN 9780815371335 , 2018

**Reference Books**

1. Swiderski, Frank and Sydex, “Threat Modeling”, Microsoft Press, 2004.
2. William Stallings and Lawrie Brown, “Computer Security: Principles and Practice”, Prentice Hall, 2008.
3. Joseph M Kizza, “ComSwputer Network Security”, Springer Verlag, 2005
4. Thomas Calabres and Tom Calabrese, “Information Security Intelligence: Cryptographic Principles & Application”, Thomson Delmar Learning, 2004.
5. Michael Gregg, "Certified Ethical Hacker (CEH) Cert Guide", Pearson India, 2014

<b>MBA SECOND YEAR</b>					
<b>Course Code</b>	<b>AMBABI0412</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Database Technology</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Course objective: Objective of this course is to:</b>				<b>Duration:40 Hours</b>	
1	Understand the basic concepts and the applications of database systems.				
2	Understand the basic concepts of RDBMS				
3	Master the basics of SQL and construct queries using SQL & Familiar with the basic issues of transaction processing				
4	Understand the concept of data warehousing and recent trends.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Databases.</b>	<b>8 Hours</b>			
<b>Database Management System:</b> Introduction, Organization and Components of Database Management Systems, Advantages of DBMS. Database Models: Relational Database Model, Network Database Model, Hierarchical Database Model, Semantic Database Model.					
<b>UNIT-II</b>	<b>Relational Database Design</b>	<b>8 Hours</b>			
<b>Relational Database Design:</b> Concepts, E-R Diagram, ACID property, Integrity Constraints, Functional dependencies, Concept of Normalization, Physical Database Design, Decomposition of Relation Schema, Relational model, database schema, relational algebra, outer join and manipulation of databases.					
<b>UNIT-III</b>	<b>Tuple Relational Calculus</b>	<b>8 Hours</b>			
<b>Tuple relational calculus:</b> Example queries, formal definitions and safety of expressions; <b>SQL:</b> Query processing and optimization, set operations, aggregate functions, DDL, DML and views, comparison of queries in relational algebra, SQL, tuple relation calculus and domain relation calculus. Serializability and testing for serializability, concurrency control schemes, lock-based protocols, two-phase locking protocols, graph-based protocols, time stamp-based protocols, deadlocks.					
<b>UNIT-IV</b>	<b>Data Warehousing</b>	<b>8 Hours</b>			
<b>Data Warehousing:</b> Overview, Definition, Data Warehousing Components, building a Data Warehouse, Mapping the Data Warehouse to a Multiprocessor Architecture, Difference between Database System and Data Warehouse, Multi-Dimensional Data Model, Data Cubes, Stars, Snow Flakes, Fact Constellations, Concept hierarchy, Process Architecture, 3 Tier Architecture, Data Scrubbing, Data Marting.					
<b>UNIT-V</b>	<b>Data Management System&amp; Trends</b>	<b>8 Hours</b>			
<b>Data Management:</b> Recovery systems, log-based recovery, deferred and immediate database modification, object oriented database design. Concept of NoSQL databases, Brief History of NoSQL Databases, Features of NoSQL, Types of NoSQL Databases (MongoDb), CAP Theorem, Eventual Consistency, Advantages of NoSQL.					
<b>Course outcome: At the end of course, the student will be able to have</b>					
CO1	Knowledge about Database Technology				(Understand) K2
CO2	Understanding the business application of Database Technology				(Apply) K3
CO 3	Formulate SQL queries on the data & Understand the concepts of transactions, their processing				( Create) K6
CO4	Knowledge and usage of data warehousing & Data Model				(Apply) K3

CO5	Knowledge on Unstructured Database and its application	(Apply) K3
<b>Text books</b>		
<ol style="list-style-type: none"> <li>1. Korth, Silbertz, Sudarshan," Database Concepts", McGraw Hill</li> <li>2. Data base System Concepts, A. Silberschatz, Henry. F. Korth, S. Sudarshan, McGraw Hill Education(India) Private Limited 1, 6th edition</li> <li>3. RAMAKRISHNAN"Database Management Systems",McGraw Hill</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Leon &amp;Leon,"Database Management Systems", Vikas Publishing House</li> <li>2. Bipin C. Desai, " An Introduction to Database Systems", Gagotia Publications</li> <li>3. Majumdar &amp; Bhattacharya, "Database Management System", TMH</li> </ol>		



MBA SECOND YEAR					
Course Code	AMBABI0413	L	T	P	Credit
Course Title	System Analysis & Design	3	1	0	4
Course objective: Objective of this course is to:				Duration: 40 Hours	
1	Provide knowledge of different concepts of system analysis and design so that students will be able to develop information systems using different methodologies, tools , techniques and approaches.				
2	Acquainting the students with tools techniques of planning, analyzing, designing, implementing and maintaining Information system				
3	Understand techniques and tools for data process modeling , entity – relationship diagrams & physical database diagrams				
4	Understand the project monitoring tools & techniques				
Course Contents / Syllabus					
UNIT-I	System Engineering Ethics				8 Hours
<p><b>Systems Ethics-</b> Over View of System Analysis and Design, Business System Concepts, Characteristics of a System, Elements of a System, Types of Systems, Systems Models, Categories of Information &amp; Information Management System. SAD/SE state ofthe art, gaps, industry focus and research.</p> <p><b>System Development Life Cycle:</b> Investigation, Analysis, Design, Implementation, Post Implementation Review and Maintenance.V Process Model, Introduction to Agile Methodology, Iterative-incremental process models – RUP and Scrum comparative analysis.</p>					
UNIT-II	Specifications& Structured Analysis				8 Hours
<p><b>RequirementSpecification:</b> System Requirement Specifications, Requirement Specification Process: Elicitation, Analysis, Documentation, Review and Management of User Needs, concepts, methods and standards.<b>Feasibility Analysis:</b>Feasibility Study, Steps in Feasibility Analysis, Feasibility Report. Information Modelling, IEEE Standards for SRS.</p> <p><b>Structured Analysis:</b>Data Flow Diagrams, <i>Entity Relationship Diagrams,Use case Diagram, Activity Diagram, Class Diagram</i>, Decision Tables, Data Dictionary; Process Modeling: Structured English, Decision Tree &amp; Decision Table, Object-Oriented Analysis &amp; Design (OOD). Tools (EA &amp; Star UML).</p>					
UNIT-III	Project Organization & Scheduling				8 Hours
<p><b>Systems Planning and Investigation:</b> Basis for Planning in Systems Analysis, Dimensions of Planning, Initial Investigation, Needs Identification. Project schedule, Scheduling Objectives, Building the project schedule, Scheduling terminology and techniques, <b>Network Diagrams:</b> PERT, CPM, Bar Charts: Milestone Charts, Gantt Charts.</p>					
UNIT-IV	System Implementation				8 Hours
<p><b>System Implementation:</b> Implementation Plan, Hardware Selection, Determining size and capacity requirements, Computer evaluation and measurement, Maintenance and Support, Vendor Selection, Software Selection, Criteria for Software Selection, Performance Evaluation.</p>					
UNIT-V	Software Quality & Trends				8 Hours
<p><b>Software Quality Assurance (SQA):</b> Quality concepts, Software quality assurance, SQA activities, Formal approaches to SQA; Statistical software quality assurance; CMM, The ISO 9000 Standard, Six sigma.</p> <p><b>Types of Review:</b> Inspections, Desk checks, Walkthroughs, Code Reviews, Pair Programming.</p> <p><b>Latest Trends in SAD:</b> Cloud &amp; DevOps.</p>					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO 1	Understand the principles and tools of system analysis and design & the basic concept of SDLC	(Understand) K2
CO 2	Apply appropriate Information systems tools & Techniques to create solutions to information systems problems.	(Apply) K3
CO 3	Learn & Understand the basic concept of Project Scheduling , PERT , CPM and Bar Chart..	(Evaluate) K4
CO 4	Llearn and evaluate software implementation with a clear understanding on quality assurance and quality framework.	(Evaluate) K4
CO 5	Learn types of Project review and new trends in SAD	(Apply) K3

### **Text books**

1. I.T.Haryszkiewicz, Introduction of System Analysis and Design, Pearson Education, (PHI) 1998.
2. V.Rajaraman, Analysis and Design of Information System, Pearson Education, 1991.
3. J.A.Senn, "Analysis and Design of Information Systems" McGraw-Hill.
4. R. S. Pressman, Software Engineering: A Practitioners Approach, McGraw Hill.
5. Rajib Mall, Fundamentals of Software Engineering, PHI Publication.
6. Software Project Management by M. Cotterell

### **Reference Books**

1. K. K. Aggarwal and Yogesh Singh, Software Engineering, New Age International Publishers.
2. Software Project Managemnet by S. A. Kelkar

<b>Course Name: MBA/ Second Year- Semester 4</b>					
<b>Course Code</b>	<b>AMBALS0412</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Information Systems in Logistics and Supply Chain</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
	The objective of the course is to develop experience in creating a digital supply chain strategy and also identify sustainable sources for logistics and transport management system.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Digitizing supply chain</b>				<b>7 Hours</b>
Introduction to digital business and e-commerce, E-environment and Factors Driving E-Business. Different Models of E-Business. Introduction, Digitizing vs Digitalizing in Supply Chains. e-Commerce Transformation and Omnichannel Revolution. Industry 4.0 and Digital Transformation. eSCM Framework: eSCM process and enablers.					
<b>UNIT-II</b>	<b>Managing Digital Business Infrastructure</b>				<b>9 Hours</b>
Technology and digital business infrastructure components, Focus on Web services, SaaS, cloud computing and service-oriented architecture (SOA), Benefits of web services or SaaS, Application programming interfaces (APIs), Challenges of deploying SaaS. Virtualisation, Service-oriented architecture (SOA), Selecting hosting providers, managing service quality when selecting Internet service and cloud hosting providers, Introduction to EDI. Artificial Intelligence Driven SCs: Challenges and Opportunities.					
<b>UNIT-III</b>	<b>Procurement and E Logistics</b>				<b>9 Hours</b>
Understanding the Procurement process, Participants in different types of e-procurement, Drivers of e-procurement, Benefits of e-procurement, Estimating e-procurement costs, Barriers and risks of e-procurement adoption. Push and Pull Supply Chain, E- Logistics Technologies, Advance Ship Notice (ASN), Tracking systems, Satellite global positioning systems (GPS) and geographic information systems (GIS), Bar-coding and scanning, Digital Signature Technology, Wireless Technology – Radio Frequency Identification and Detection (RFID).					
<b>UNIT-IV</b>	<b>Sustainable Supply Chain and Green Procurement</b>				<b>7 Hours</b>
Traditional Supply Chain and Green Supply Chain, Sustainable Production & Efficiency. Green Procurement and Purchasing – Definitions of green purchasing – Drivers of green purchasing – Green purchasing strategies – Green purchasing performance measurement –Green Supplier Development and Collaboration.					
<b>UNIT-V</b>	<b>Green Logistics and transportation</b>				<b>7 Hours</b>
Definitions of Green Logistics – Critical drivers of Green Logistics – Green transportation and logistics practices – Environmental impacts of transportation and logistics. Closing the Loop: Reverse Logistics Closed loop supply chain / circular economy, End of life / reverse logistics management, renewable energy, transportation.					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO1	Understand the digitization of supply chain to meet modern user needs	Understanding (K2)
CO2	Creating a sustainable digital infrastructure with technological integration	Creating (K6)
CO3	Understand and apply advanced technologies for effective e -procurement and e-logistics	Applying (K3)
CO4	Understand sustainable supply chains and green procurement processes	Understanding (K2)
CO5	Understand the concept of green logistics and transportation	Understanding (K2)

#### **Text books**

1. Mangla, S. K., Luthra, S., Jakhar, S. K., Kumar, A., & Rana, N. P. (Eds.). (2019). *Sustainable Procurement in Supply Chain Operations*. CRC Press.
2. Reintjes, M. (2023). *13 Sustainable Procurement and Logistics Management*. Sustainable Business Management, 209.
3. Chaffy D, *Digital Business and E commerce Management – Strategy, Implementation and Practices*. Pearson
4. Oswald G., Kleinemeier M., *Shaping the Digital Enterprise: Trends and Use Cases in Digital Innovation and Transformation*. Springer

#### **Reference Books**

1. David B, G., Trautrim, A., & Wong, C. Y. (2021). *Sustainable logistics and supply chain management*. Kogan page.
2. Joseph, P. T. (2023). *E-commerce: An Indian perspective*. PHI Learning Pvt. Ltd..
3. Ayers, "Costs – Getting to the Root Causes," Supply Chain Management Review, November/December 2003, 24-30.
4. Johnson, M. E. and S. Whang (2002). "E-business and Supply Chain Management: An Overview and Framework." *Production and Operations Management* 11(4): 413- 423.

#### **Links:**

<https://procurementmag.com/procurement-strategy/amazon-business-sustainability-through-digital-procurement>

<https://www.industryweek.com/technology-and-iiot/article/21168392/inside-tata-steels-digital-transformation>

<https://youtu.be/Xj31iRr9y28>

<b>Course Name: MBA Second Year / Semester 4</b>					
<b>Course Code</b>	<b>AMBALS0411</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Global Business Management for Logistics &amp; Supply Chain</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>		<b>Duration: 40 Hours</b>			
	Students will be well versed with global supply chain and logistics system and enrich their knowledge in the field of international trade & logistics. They will understand the process of international operations related to logistics & supply chain and would be able to develop insights about global supply chain practices for catering international markets and develop international marketing and sales plans.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Global Supply Chains</b>				<b>8 Hours</b>
Introduction, features of global supply chains, geographically dispersed and culturally diverse supply chains. Supply chain operations management, off-shoring, multi-country outsourcing, push-pull, reverse supply chains, risks & mitigation.					
<b>UNIT-II</b>	<b>International Trade &amp; Logistics</b>				<b>8 Hours</b>
Corporate decision-making criteria attendant to global import/export and other market entry strategies, evaluation of international opportunities. Management of international logistics operations including global sourcing, global transportation, facility network design, intermediaries. Trade documentation: operations, government agencies, import/export channel networks.					
<b>UNIT-III</b>	<b>International Operations Management</b>				<b>8 Hours</b>
Introduction to operations management, Process, product and service design, Global supply chain management, Operations planning. Global operations sustainability, Quality management, Resource and capacity planning, Global procurement management.					
<b>UNIT-IV</b>	<b>Supply Chain Practices</b>				<b>8 Hours</b>
Analysis, planning, and management of domestic and international procurement and supply activities, Procurement and supply management in the context of domestic and global supply-chain networks. Strategic sourcing relationships, Supply management best practices, E-perspectives on supply management.					
<b>UNIT-V</b>	<b>International Marketing &amp; Sales</b>				<b>8 Hours</b>
International sales and marketing, International marketing plan: Target market demands and preferences, Evaluation of competitive forces. Use of information to create marketing and sales solutions, Trade financial plan and the global supply chain plan to form a complete project plan for an international venture, Green Logistics.					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO1:	Understand the global supply chain and logistics system	Understand (K2)
CO2:	Analyse various aspects of international trade and logistics	Analyse (K4)
CO3:	Develop international operations efficiently and effectively	Create (K6)
CO4:	Develop plans to efficiently utilize global supply chain networks.	Create (K6)
CO5:	Create international marketing and sales plans pertinent to global logistics & supply chain	Create (K6)
<b>Text books</b>		
1. Rusell, R. S., Taylor, B., Gudavaletti P.K., (2023). Operations & Supply Chain Management. Wiley		
<b>Reference Books</b>		
8. Mangan J., Lalwani C., Calatayud A. (2021), Global Logistics and Supply Chain Management. Wiley		
9. Chopra, S.(2021). Supply Chain Management: Strategy, Planning & Operations. Pearson		
<b>Links:</b>		
<a href="https://www.youtube.com/watch?v=VT9AuMNQUMU">https://www.youtube.com/watch?v=VT9AuMNQUMU</a>		
<a href="https://www.youtube.com/watch?v=4-OU7WiVxh8">https://www.youtube.com/watch?v=4-OU7WiVxh8</a>		

<b>Course Name: MBA Second Year / Semester 4</b>							
<b>Course Code</b>	<b>AMBALS0413</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>		
<b>Course Title</b>	<b>Supply Chain Analytics</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>		
<b>Course Objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>			
	Understanding the core concepts of supply chain analytics and ensuring effective inventory management. Learning application of quantitative techniques for managing supply chain and establishing effective supplier relation with application of digital tools.						
<b>Course Contents / Syllabus</b>							
<b>UNIT-I</b>	<b>Supply Chain Management</b>					<b>8 Hours</b>	
Supply Chain, Stages of Supply chain, Value Chain, Cycle, Supply Chain Process, Key issues in SCM, Drivers of Supply Chain, Challenges in Supply Chain, Strategic perspectives of Supply chain: Strategic fit, Contemporary practices in SCM, Innovations in SCM.							
<b>UNIT-II</b>	<b>Inventory Management</b>					<b>8 Hours</b>	
Inventory, Types & nature of inventory, Methods for inventory management, Newsvendor model Inventory systems, Periodic and continuous reviews, Important documents. ABC analysis, XYZ analysis, Just in Time (JIT), Minimum requirement planning (MRP), Emerging trends in inventory management.							
<b>UNIT-III</b>	<b>Quantitative Techniques for SCM</b>					<b>8 Hours</b>	
Linear Programming Problems (LPP), Facility Location Decision. Correlation, Coefficient of Variation (CoV), Regression, ANOVA.							
<b>UNIT-IV</b>	<b>Lean Operations Management</b>					<b>8 Hours</b>	
Lean, Application of Lean concept. Quality, Models of quality, Total quality management (TQM), Total Productive Maintenance (TPM), Six Sigma.							
<b>UNIT-V</b>	<b>Supplier Relationship Management</b>					<b>8 Hours</b>	
Importance of supplier relations, Risks in supplier relations, Disruption, Sources of Disruption, Multi-sourcing. Digital twin and its application, Predictive Maintenance, Global vs Local Supply Chains.							

**Course outcome: At the end of course, the student will be able to:**

CO1	Understand relevant concepts of supply chain analytics	Understand (K2)
CO2	Evaluate the issues in inventory management for better functioning	Evaluate (K5)
CO3	Apply various quantitative techniques to manage various facets of supply chain process.	Apply (K3)
CO4	Apply the concepts of quality control and lean in managing supply chain.	Apply (K3)
CO5	Develop a relationship network of stakeholders for smooth operations.	Create (K6)

**Text books**

1. Robertson W. Peter, Supply Chain Analytics: Using Data to Optimise Supply Chain Processes, Routledge

**Reference Books**

1. Liu, Y. Kurt. Supply Chain Analytics: Concepts, techniques & application, Springer Nature

**Links:**

1. [https://www.academia.edu/39043818/Supply\\_chain\\_analytics](https://www.academia.edu/39043818/Supply_chain_analytics)
2. <https://www.youtube.com/watch?v=9FDKcxea3h8&list=PLnD8JdB5BhfQAqqcyN7fe0posEQX9rvwO&index=3>



<b>Course Name: MBA Second Year/Semester 4</b>					
<b>Course Code</b>	<b>AMBABA0412</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Machine Learning and Artificial Intelligence</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
	The objective of this course is to make student understand the concept of artificial and machine learning, supervised and machine learning models, historical perspective of AI and ML and scope of AIML in business.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Artificial Intelligence (AI)</b>				<b>7 Hours</b>
Introduction to AI, strong AI vs. weak AI, Functions of AI, Characteristics of artificial intelligence, Applications of AI. Historical milestones in the development of AI, Great contributors.					
<b>UNIT-II</b>	<b>Search Techniques</b>				<b>8 Hours</b>
Problem-solving agents, searching for solutions; uniform search strategies: breadth first search, depth-first search, depth limited search, bidirectional search, comparing uniform search strategies. Heuristic search strategies Greedy best-first search, A* search, AO* search, memory bounded heuristic search: local search algorithms & optimization problems: Hill climbing search, simulated annealing search, local beam search.					
<b>UNIT-III</b>	<b>Machine Learning</b>				<b>9 Hours</b>
History of ML, Introduction of Machine Learning Approaches, Issues in Machine Learning and Data Science Vs Machine Learning. Confusion metrics, AUC-ROC, Sensitivity and specificity Analysis. Underfitting and Overfitting, Bias and Variance, Concept Learning Task, Inductive Bias.					
<b>UNIT-IV</b>	<b>Supervised Learning</b>				<b>8 Hours</b>
Linear Regression, Multiple Linear Regression, Logistic Regression, Polynomial Regression, Decision Trees: ID3, C4.5, CART.					
<b>UNIT-V</b>	<b>Unsupervised Learning</b>				<b>8 Hours</b>
Introduction to clustering, K-means clustering, K-Nearest Neighbor, Iterative distance-based clustering, Dealing with continuous, categorical values in K-Means, K-Mode Clustering, density-based clustering.					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO1	Understand the concept of Artificial Intelligence.	Understanding (K2)
CO2	Apply the concepts of AI in solutions that require problem-solving, inference, and perception.	Applying (K3)
CO3	Understand the concept of Machine Learning.	Understanding (K2)
CO4	Understand and apply the basic supervised machine learning algorithms.	Applying (K3)
CO5	Understand and apply unsupervised machine learning algorithms.	Applying (K3)

**Text books**

1. Yadav, S. P., Mahato, D. P., & Linh, N. T. D. (Eds.). (2020). Distributed artificial intelligence: A modern approach. CRC Press.
2. Burkov, A. (2019). The hundred-page machine learning book (Vol. 1, p. 32). Quebec City, QC, Canada: Andriy Burkov.

**Reference Books**

1. Raschka, S., & Mirjalili, V. (2019). Python machine learning: Machine learning and deep learning with Python, scikit-learn, and TensorFlow Packt Publishing Ltd.
2. Rebal, G., Ravi, A., & Churiwala, S. (2019). An introduction to machine learning. Springer.

<b>Course Name: MBA Second Year/ Semester 4</b>					
<b>Course Code</b>	<b>AMBABA0411</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Data Visualization</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
	This course will introduce the main concepts of data visualization with a hands-on tutorial using Tableau and Power BI.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Data Visualisation</b>				<b>6 Hours</b>
Concept of Data and Data visualisation, Foundations for building Data Visualizations, Visualizing categories Design principles. Need for Power BI and Tableau, Power BI vs. Tableau, Reporting and Storytelling, Installing Tableau, Menus and Toolbar, Converting Excel, and text Data into Tableau Desktop.					
<b>UNIT-II</b>	<b>Tableau</b>				<b>9 Hours</b>
Data Interpreter for data cleaning, Data Preparation, Managing Metadata (Renaming and Hiding Data Fields, Grouping in folders and Hierarchies), bins, Filtering and sorting data, Adding Titles, Labels, and descriptions. Overview of SUM, AVG, and Aggregate Features Creating custom calculations and fields Applying new data calculations to your visualization. Area, bar, heatmap, box plot, pareto, line, scatter plot, tree map, crosstab, geographic map, waterfall.					
<b>UNIT-III</b>	<b>Distributing, and Publishing</b>				<b>7 Hours</b>
Dual Axis Reports, Blended axis, add reference lines, reference distributions. Create a Dashboard, Interpret with KPIs, create a story.					
<b>UNIT-IV</b>	<b>Introduction to Power BI</b>				<b>8 Hours</b>
Power BI Desktop Overview, Data Discovery with Power BI Desktop, Transforming Data – Appending and merging queries, combining files, adding columns. Modeling Basics, Model Enhancements, What If Parameters, DAX Basics, Navigation Function, Calculated Tables, Measure Basics, Time Intelligence Functions.					
<b>UNIT-V</b>	<b>Visualizing Data in Power BI</b>				<b>10 Hours</b>
Basic Reports, Interactive Reports - Adding Slicers for Filters, Visualizing Tabular Data, categorical data, Data Trends, Categorical and Trend Data Together, Geographical Data with Maps, Digital Storytelling. Deploying to the Power BI Service, Creating and Sharing Dashboards, Using Power BI Q&A, Excel Integration, Export and Embed Options. Refreshing Data Overview, Installing the Data Gateway, Scheduling a Data Refresh. Power BI Mobile Overview, Designing Reports and Dashboards for Mobile, Interacting with the Power BI Mobile App.					

<b>Course outcome: At the end of course, the student will be able to:</b>		
CO1	Understand the concepts required for Data Visualization.	Understanding (K2)
CO2	Illustrate and analyze data using various functions in Tableau Desktop.	Analyse (K4)
CO3	Creating ad-hoc reports, data visualizations, and dashboards for publishing using Tableau Desktop.	Creating (K6)
CO4	Analyze data and create data models using Power BI Desktop.	Creating (K6)
CO5	Creating reports and dashboards using Power BI Desktop.	Creating (K6)
<b>Text books</b>		
<ol style="list-style-type: none"> <li>1. Wilke, C. O. (2019). Fundamentals of data visualization: a primer on making informative and compelling figures. O'Reilly Media.</li> <li>2. Lachev, T., &amp; Price, E. (2015). Applied microsoft power BI: bring your data to life!. Prologika Press.</li> <li>3. Loth, A. (2019). Visual analytics with Tableau. John Wiley &amp; Sons.</li> </ol>		
<b>Reference Books</b>		
<ol style="list-style-type: none"> <li>1. Ferrari, A., &amp; Russo, M. (2016). Introducing Microsoft Power BI. Microsoft Press.</li> <li>2. Milligan, J. N., Hutchinson, B., Tossell, M., &amp; Andreoli, R. (2022). Learning Tableau 2022: Create effective data visualizations, build interactive visual analytics, and improve your data storytelling capabilities. Packt Publishing Ltd.</li> </ol>		
<b>Links:</b>		
<ol style="list-style-type: none"> <li>1. <a href="#">Dashboard Design Tips: Creative Ways to Use Images   Tableau Conference 2023 - Bing video</a></li> <li>2. <a href="#">Tableau KPI Dashboard Design tutorial for Business Step by Step - Bing video</a></li> <li>3. <a href="#">How to Install Tableau and Create First Visualization   Tableau Tutorials for Beginners - Bing video</a></li> <li>4. <a href="#">Building A Quarterly Sales Forecast Dashboard Using Tableau   Sales Forecast Dashboard Using Tableau - Bing video</a></li> </ol>		

<b>Course Name: MBA Second Year /Semester 4</b>					
<b>Course Code</b>	<b>AMBABA0413</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>Course Title</b>	<b>Social Media Analytics</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Course Objective: Objective of this course is to:</b>				<b>Duration: 40 Hours</b>	
	The objective of this course is to make students learn the foundation understanding of web and social media metrics and analytics, develop social media strategy, and measure social media campaign effectiveness. Students will also be able to make better business decisions by leveraging social media data.				
<b>Course Contents / Syllabus</b>					
<b>UNIT-I</b>	<b>Introduction to Social Media Data</b>				<b>7 Hours</b>
Types of data on social platforms, ethical sensitivities in obtaining and operating on social data, social platform API to obtain data, and data structure. Loading of social media corpus, summary statistics, visualize the corpus along geographic and temporal axes.					
<b>UNIT-II</b>	<b>Text Analytics and Text Mining</b>				<b>8 Hours</b>
Text Analytics and Text Mining Concepts and Definitions, Natural Language Processing. Text Mining Applications, Text Mining Process, Text Mining Tools.					
<b>UNIT-III</b>	<b>Web Analytics</b>				<b>8 Hours</b>
Web Metrics, Link Analysis and Web Search, Web Structure Mining, Search Engines, Search Engine Optimization. Web analytics - Web analytics 2.0 framework, Web Analytics Maturity Model and Web Analytics Tools, Natural Language Processing Techniques for Micro-text Analysis PULSE metrics on business and technical issues; HEART metrics on user behaviour issues; On-site web analytics, off-site web analytics, the goal signal-metric process.					
<b>UNIT-IV</b>	<b>Social Media Analytics</b>				<b>8 Hours</b>
Social media KPIs (reach and engagement) - Performing social media analytics, Social Analytics and Social Network Analysis, Social Media Analytics. Social campaigns. Measuring and Analyzing social campaigns, defining goals and evaluating outcomes, Network Analysis. (LinkedIn, Instagram, YouTube Twitter etc.					
<b>UNIT-V</b>	<b>Sentiment Analysis</b>				<b>9 Hours</b>
Sentiment Classification, Feature-Based Opinion Mining and Summarization, Comparative Sentence and Relation Mining, Opinion Search, Opinion Spam. Data Collection and Pre-Processing, Data Modeling for Web Usage Mining, Discovery & analysis of web usage patterns.					
<b>Course outcome: At the end of course, the student will be able to:</b>					

CO1	Understand the types of social media data and the ethical sensitivity of this data.	Understanding (K2)
CO2	Understand and apply the concepts of text analytics.	Applying (K3)
CO3	Understand and apply web analytics and related concepts.	Applying (K3)
CO4	Draw meaningful insights and provide actionable and strategic recommendations based on thorough social media data analysis.	Evaluating (K5)
CO5	Compute sentiment over social media text.	Evaluating (K5)

**Text books**

1. Kumar, S., & Qiu, L. (2021). Social media analytics and practical applications: The change to the competition landscape. CRC Press.
2. Yigitcanlar, T., & Kankanamge, N. (2022). Urban Analytics with Social Media Data: Foundations, Applications and Platforms. CRC Press.
3. Agrawal, R., & Gupta, N. (Eds.). (2018). Extracting knowledge from opinion mining. IGI Global.

**Reference Books**

1. Finger, L., & Dutta, S. (2014). Ask, measure, learn: using social media analytics to understand and influence customer behavior. " O'Reilly Media, Inc."
2. Agarwal, B., Nayak, R., Mittal, N., & Patnaik, S. (Eds.). (2020). Deep learning-based approaches for sentiment analysis (p. 4). Singapore: Springer.
3. Ram, J., & Zhang, C. (2021). Examining the role of social media analytics in providing competitive intelligence: The impacts and limitations. Journal of Global Information Management (JGIM), 29(6), 1-18.
4. Zhang, L., Wang, S., & Liu, B. (2018). Deep learning for sentiment analysis: A survey. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 8(4), e1253.