TULSIRAMJI GAIKWAD-PATIL College of Engineering & Technology

Mohgaon, Wardha Road, Nagpur - 441 108

An Autonomous Institute

DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

Semester IV

Teaching Scheme & Syllabus

National Education Policy 2020

From

Academic Year 2026 – 27

Vision of Institute

To emerge as a learning Center of Excellence in the National Ethos in domains of Science, Technology and Management.

Mission of Institute

M1- To strive for rearing standard and stature of the students by practicing high standards of professional ethics, transparency and accountability.

M2- To provide facilities and services to meet the challenges of Industry and Society

M3- To facilitate socially responsive research, innovation and entrepreneurship

M4- To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices.

Vision of the Department

To become learning centre for management by producing professionally committed managers who will contribute in positive sense towards society and nation building at large.

Mission of the Department

- To be an epitome for higher learning by developing effective leaders and entrepreneurs who anticipate, analyze & manage contemporary as well as emerging business and social issues.
- To ensure sustainable growth in association with Industry leaders, Professional bodies, Local community and international organizations

Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur

Accredited with NAAC A+ Grade

An Autonomous Institute Affiliated to RTMNagpur University, Nagpur

Scheme of Instructions for Second Year Master of Business Administration

Semester–IV (w.e.f.: AY 2026-27)

Sr. No	Course Category	Course Code	Course Title	L	T	P	Total Contact Hrs	Credits	Exam Scheme				
									CT–1	CT-2	CA	ESE	TOTAL
1	PCC	MBA42401	Leadership & Team Management	4	-	-	4	4	-	-	-	-	100
2	PROJ	MBA42402	(Project- Phase II) Project defense through Presentation (Assessment by External Examiner)	-	-	20	20	10	-	-	100	100	200
			Viva-Voce (Assessment by External Examiner)	-	-				-	-	-	50	50
4*	PEC	MBA42403A–MBA42408A	Specialization –II-A	4	-	-	4	4	15	15	10	60	100
5#	PEC	MBA42403B–MBA42408B	Specialization –II-B	4	-	-	4	4	15	15	10	60	100
			Total	**12**	-	**20**	**32**	**22**	**30**	**30**	**120**	**220**	**550**

TA/CA-Teacher Assessment/ Continuous Assessment

ESE- End Semester Examination (For Laboratory: End Semester Performance)

PROGRESSIVE TOTAL CREDITS: 66+22=88

				October 2026	2.0	Applicable for AY2026-27 Onwards
Chairperson	**Vice Principal / Director Academics**	**Director Administration**	**Principal**	**Date of Release**	**Version**	

Tulsiramji Gaikwad-Patil College of Engineering and Technology
Wardha Road, Nagpur - 441108
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Master of Business Administration Semester-IV

Teaching Scheme		**MBA42401- Leadership & Team Management**	**Examination Scheme**	
Theory	4 Hrs/week		**CT-I**	15 Marks
Tutorial	-		**CT-II**	15 Marks
Total Credits	**4**		**CA**	10 Marks
Duration of ESE: 3 Hrs.			**ESE**	60 Marks
Pre-Requisites: Principles of Management, Organizational Behaviour, Human Resource Management			**Total Marks**	100 Marks

Course Objectives

1. To examine the foundational theories, traits, and behavioral styles of organizational leadership across diverse business environments.
2. To understand contemporary leadership paradigms including transformational, servant, ethical, and authentic leadership models.
3. To analyze team dynamics, developmental life cycles, and interpersonal processes critical for creating high-performing teams.
4. To cultivate competence in resolving team conflict, negotiating consensus, and managing cross-cultural and virtual team structures.
5. To foster strategic decision-making, empowerment, and leadership coaching skills to lead organizational change and culture transformation.

Course Contents

Unit I	Foundations of Leadership & Classical Theories: Concept, nature, significance, and functions of leadership; Leadership vs. Management; Power, authority, and influence tactics; Classical Leadership Theories: Trait Theory, Behavioral Theories (Ohio State Studies, Michigan Studies, Blake & Mouton's Managerial Grid); Contingency and Situational Theories: Fiedler's Contingency Model, Hersey & Blanchard's Situational Leadership Theory (SLT), Path-Goal Theory (Robert House), and Leader-Member Exchange (LMX) Theory; Role of leadership in Indian ethos and modern organizational context.
Unit II	Contemporary & Strategic Leadership Paradigms: Transformational vs. Transactional Leadership (Bass's Multifactor Model); Charismatic Leadership; Servant Leadership (Robert Greenleaf); Authentic and Ethical Leadership; Spiritual and Value-Based Leadership; Emotional Intelligence (EQ) in Leadership effectiveness (Goleman's Framework); Resilient and adaptive leadership in VUCA (Volatility, Uncertainty, Complexity, Ambiguity) environments; Strategic leadership: Vision formulation, driving innovation, and shaping corporate culture.

Unit III	Team Dynamics, Formation, and Roles: Difference between Groups and Teams; Classification and types of teams (Cross-functional, Self-managed, Project, Problem-solving teams); Tuckman's Stages of Group/Team Development (Forming, Storming, Norming, Performing, Adjourning); Belbin's Team Role Model; Team composition, size, diversity, and norms; Determinants of team cohesion and psychological safety; High-Performance Teams (HPT): Characteristics, performance metrics, and accountability frameworks.
Unit IV	Interpersonal Processes, Team Conflict & Collaboration: Interpersonal communication and active listening in teams; Team decision-making techniques: Brainstorming, Nominal Group Technique (NGT), Delphi Technique; Overcoming Groupthink and Groupshift; Conflict in teams: Sources, types (Task, Relationship, Process), and functional vs. dysfunctional conflict; Conflict management styles (Thomas-Kilmann Conflict Mode Instrument - TKI); Negotiation and collaboration strategies; Building and managing Virtual, Remote, and Cross-Cultural Global Teams.
Unit V	Empowerment, Coaching, and Leading Organizational Change: Delegation, autonomy, and employee empowerment; The leader as coach and mentor: The GROW model of coaching; Motivation and recognition systems in team performance; Leading organizational change: Kotter's 8-Step Change Model and Lewin's Change Management Model; Overcoming resistance to change; Succession planning and developing future leadership pipelines; Ethics, inclusivity, and sustainable leadership practices.
Text Books	
T.1	Northouse, Peter G., Leadership: Theory and Practice, 9th Edition, SAGE Publications, 2021.
T.2	Yukl, Gary, Leadership in Organizations, 9th Edition, Pearson Education, 2020.
Reference Books	
R.1	Levi, Daniel, and Askay, David A., Group Dynamics for Teams, 6th Edition, SAGE Publications, 2020.
R.2	Lencioni, Patrick, The Five Dysfunctions of a Team: A Leadership Fable, Jossey-Bass / John Wiley & Sons, 2002.
Useful Links (NPTEL)	
1	NPTEL Course on "Leadership and Team Effectiveness" by Prof. Santosh Rangnekar, IIT Roorkee: https://nptel.ac.in/courses/110107074

CO Code	Course Outcomes	CL	Class Sessions
MBA42401.1	Compare and critique classical and situational leadership theories, traits, and behavioral styles to diagnose leadership effectiveness in organizations.	3	12
MBA42401.2	Apply contemporary, ethical, authentic, and transformational leadership frameworks to inspire workforce commitment in volatile business climates.	5	12

MBA42401.3	Analyze team developmental stages, role configurations, and psychological safety drivers to establish high-performing collaborative teams.	5	12
MBA42401.4	Implement conflict resolution instruments, structured group decision-making methods, and cross-cultural collaboration strategies in virtual teams.	3	12
MBA42401.5	Design coaching, empowerment, and change management strategies (Kotter's/Lewin's models) to guide sustainable organizational transformations.	4	12

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Program: Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42403(A)	Strategic HRM	40	-	-	4

Pre-Requisites: Human Resource Management, Organizational Behavior

Course Objectives:

1.	Students should be able to explain the factors affecting HRP and HRP process of an organization.
2.	Students should be able to determine the process of demand and supply forecasting while doing human resource planning.
3.	Students should be able to devise the manpower plan for an organization.
4.	Students should be able to formulate Recruitment and Selection process on the basis of HRP.
5.	Students should be able to outline the Recent Trends in Manpower Development and Planning

Course Contents

Unit I	Introduction - Meaning & Definition of HRM, Evolution & Development of HRM, Functions of HRM, Significance of HRM, Objectives of HRM, Strategic HRM-concept
Unit II	Job Analysis & Evaluation: Process of Job Analysis, Job Description, Job Specification, Job Designing and Work Scheduling, Techniques for Designing Jobs, Job Evaluation, Methods and Process of Job Evaluation.
Unit III	Talent Acquisition: Human Resource Planning-Objectives, Importance & Process, Recruitment – Constraint and Challenges, Sources and Methods of Recruitment, & Selection-Concept & Methods of Selection
Unit IV	Strategic Employee Relations: Managing Employee Relations, Unions and Strategic Collective Bargaining, Reductions in force, Turnover, Employee Retention and Retirement.
Unit V	Strategic Perspective on HR Functions: Strategic HR Planning, Hiring and firing decisions, Competency-based Job Analysis, Linkage between Business Strategy and Training, Strategic Linkage of Performance Management, Strategy and Compensation.

Text Books

T.1	Strategic Management of Human Resources: by Jeffrey A. Mello, Cengage Learning
T.2	Gary Dessler & Biju Varkkey. (2009). Human Resource Management, (11th Edition) Dorling Kindessley (I) Pvt. Ltd.

Reference Books

R.1	V. S. P. Rao. (2010). Human Resource Management. (3rd Edition). Excel Books.
R.2	Subba Rao. (2013). Personnel and HRM. (Forth Revised Edition). Himalaya Publishing House Pvt. Ltd.
R.3	C.B. Mamoria, S.V. Gankar. (2011). Human Resource Management. (7th Edition). Himalaya Publication.
R.4	Strategic Human Resource Management: by Rajesh Vishwanathan, Himalaya Publishing House
R.5	Strategic Human Resource Management - A General Management Approach: by Charles R. Greer, Pearson

Useful Links

1	https://nptel.ac.in/courses/110/105/110105154/

	Course Outcomes	PO/PSO	CL	Class Sessions
MBA42403(A).1	Apply the concepts of Strategic HRM	PO1, PO2, PO3, PO4, PO5, PSO1, PSO2	3	8

MBA42403(A).2	Distinguish between various methods & processes related to HRM.	PO1, PO2, PO3, PO4, PO5, PSO1, PSO2	5	8
MBA42403(A).3	Evaluate various HR strategies.	PO1, PO2, PO3, PO4, PO5, PSO2	5	8
MBA42403(A).4	Develop employee relations, separation and retention management	PO1, PO2, PO3, PO4, PO5, PSO1, PSO2	3	8
MBA42403(A).5	Establish the strategic perspective on different HR functions	PO1, PO2, PO3, PO4, PO5, PSO1, PSO2	4	8

CO-PO Mapping

PO → / CO ↓	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	3	3	2	3	3	3	3
CO2	3	3	2	3	3	3	3
CO3	3	3	2	3	3	-	3
CO4	3	3	2	3	2	2	3
CO5	3	3	2	2	1	2	2
Avg	3	3	2	3	2	3	3

Assessment Pattern (with revised Bloom's Taxonomy)

Cognitive Level	CT 1	CT 2	TA	ESE
Remember	-	-	-	10
Understand	-	-	-	10
Apply	5	5	3	13
Analyze	5	5	3	13
Evaluate	5	5	4	14
Create	-	-	-	-
TOTAL	15	15	10	60

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Program: Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42403(A)	Strategic HRM	40	-	-	4

Summary of Revisions in the Contents

Unit No.	Modifications Proposed	Source of collection of proposed content	Reason
1.	Strategic HRM-concept	AICTE Model Curriculum// Old RTMNU Syllabus, Pimpri chichwad College of Engg	Strengthen **PO-1, PO-2, PO-4, PO-5**
2.	Job Analysis & Evaluation	AICTE Model Curriculum// New RTMNU Syllabus, RCOEM	Strengthen **PO-1, PO-2, PO-4, PO-5**
3.	Talent Acquisition: Human Resource Planning	AICTE Model Curriculum// New RTMNU Syllabus, RSCOE	Strengthen **PO-1, PO-2, PO-4, PO-5**
4.	Strategic Employee Relations	AICTE Model Curriculum// New RTMNU Syllabus, RCOEM	Strengthen **PO-1,PO-2, PO-4**
5.	Strategic Perspective on HR Functions	AICTE Model Curriculum// New RTMNU Syllabus, RCOEM	Strengthen **PO-1,PO-2**

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Program: Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42404(A)	Integrated Marketing Communication and Brand Management	40	-	-	4

Pre-Requisites: Organization Management, Marketing Management, Business Ethics

Course Objectives:

1.	Students will be able to Design the Integrated marketing communication Process for a company/product.
2.	Students will be able to develop a creative message strategy for a product and execute it.
3.	Students will be able to implement and evaluate a IMC campaign.
4.	Students will be able to Identify & Establish Brand Positioning for a given product
5.	At the end of the course the student manager shall be able to design/develop branding strategies for a product/company, brand marketing program and shall be able to evaluate a branding program.

Course Contents

Unit I	**Introduction to Integrated Marketing Communication:** Concept, functional areas of marketing communications, direct marketing and other media, IMC planning process, role in branding, audience contacts, recent trends. The Role of IMC in the Marketing Process: Marketing strategy and analysis, target marketing process, developing the marketing planning program.
Unit II	**Source, Message and Channel Factors:** Promotional planning through the persuasion matrix, source factors, message factors, channel factors, establishing objectives and budgeting for the promotional program. Creative Strategy: Planning and development, planning creative strategy, creative process, creative strategy development. Implementation and Evaluation: Appeals and execution styles, creative tactics, client evaluation and approval of creative work.
Unit III	**Media Planning and Strategy:** Traditional vs Modern media: online and mobile advertising-social media for advertising and promotion, developing media plan, market analysis and target market identification, establishing media objectives, developing and implementing media strategies, evaluation and follow-up.
Unit IV	**Brand Management & Brand Equity:** Meaning, Scope of Brand, Brand Management. Branding Challenges & opportunities. Strategic Brand Management – need & process. Identifying & Establishing Brand Positioning & Values-Brand Equity, customer based brand equity, brand positioning. Planning & implementing brand marketing program, Measuring & implementing brand performance

Unit V	**Retail Introduction:** Introduction to retail management, retail in India, theories of retail development, international retail, retail formats. Strategy & Planning: Understanding retail consumer, strategic retail, store site selection, franchising, understanding shoppers and shopping. Managing Retail: Private labels, category management, store operations and profitability. Retail marketing and branding, information systems, human interface, E retailing
Text Books	
T.1	Principles of Advertising and IMC: by Duncan, Tom, McGraw Hill.
T.2	Integrated Marketing Communications: by Pickton, D. and Broderick, A., Prentice Hall.
T.3	Managing Retailing: by Sinha Uniyal, Oxford Publications
Reference Books	
R.1	Using advertising and promotion to build brands: by Blyth, J., Pearson.
R.2	Advertising management: by Jethwaney, Oxford.
R.3	Product and Brand Management, Tapan Panda, Oxford University Press; First edition, ISBN-13: 978-0199460496
Useful Links	
1	https://nptel.ac.in/courses/110/101/110101131/

	Course Outcomes	**PO/PSO**	**CL**	**Class Sessions**
MBA42404(A).1	**Apply** the concept of marketing communication.	PO1, PO2, PO4, PO5, PSO1, PSO2	3	8
MBA42404(A).2	**Explain** the role of IMC in marketing communication process.	PO1, PO2, PO4, PO5, PSO1, PSO2	4	8
MBA42404(A).3	**Analyze** the major variables in the communication system: the source, the message & the channel.	PO1, PO2, PO4, PO5, PSO1, PSO2	4	8
MBA42404(A).4	**Derive** the Brand Positioning for a given product.	PO1, PO2, PO4, PO5, PSO1, PSO2	4	8
MBA42404(A).5	**Design** the branding strategies for a product/company, brand marketing program and shall be able to evaluate a branding program.	PO1, PO2, PO4, PO5, PSO1, PSO2	6	8

CO-PO Mapping

PO → / CO ↓	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	3	3	2	3	3	3	3
CO2	3	3	2	3	3	3	3
CO3	2	3	2	3	3	1	3
CO4	2	3	2	3	2	2	3
CO5	2	3	2	2	1	2	2
Avg	**2**	**3**	2	**3**	**2**	**2**	**3**

Assessment Pattern (with revised Bloom's Taxonomy)

Cognitive Level	CT 1	CT 2	TA	ESE
Remember	_	_	_	-
Understand	_	_	_	10
Apply	5	5	3	13
Analyze	5	5	3	13
Evaluate	5	-	4	14
Create	_	5	_	10
TOTAL	15	15	10	60

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Program: Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42404(A)	Integrated Marketing Communication and Brand Management	40	-	-	4

Summary of Revisions in the Contents

Unit No.	Modifications Proposed	Source of collection of proposed content	Reason
3.	Media Planning and Strategy	Ramdeobaba college of Engineering & Management,Nagpur	To create proper communication channel with customers.
5.	Retail Marketing	P.E.S College of Engineering, Karnataka	To Strengthen PO-1

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Program: (M.B.A) Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42405 (A)	Insurance & Wealth Management	40	-	-	4

Pre-Requisites: Finance , Insurance , Wealth Management

Course Objectives:

1.	The student will be able to identify role of banking in economic development of country.
2.	The student will be able to assess the impact of monetary policy and its instruments on banking sector
3.	The student will be able to analyze the health and risk of bank balance sheet and will also be able to appraise credit management parameters of a bank
4.	The student will be able to identify the NPAs and will also be able to appraise the process of securitization.
5.	The student will be able to distinguish the utility of various non banking institutions like insurance, housing finance and credit rating

Course Contents

Unit I	Introduction: The concept of insurance, history and its evolution, Principles of Insurance(Life and non life), insurance contract, Insurance terminology, Risk and insurance, introduction to life insurance, hazards , general insurance, insurance market in India.
Unit II	Practice of Insurance: General procedure and practice of insurance business: Policy documents and forms, Calculations of Premiums, underwriting and its procedure, premium payment, lapses and revival, assignment, nomination and surrender of policy, loan and its calculation, policy claims, procedure and its calculation (including application of average clause). Claim settlement & TPA
Unit III	IRDA & its Functions: Role and Functions of IRDA in insurance business, rules and regulations framed by IRDA for carrying out insurance business, laws regarding insurance companies in India. Insurance Products: (Life and Non Life): Term Assurance plan, Whole life plan, Endowment plan, Money back plan, ULIP, Vehicle insurance, fire, marine and health insurance.
Unit IV	Wealth Management & the Economy: Financial Planning to Wealth Management, Economic Cycles and Indicators: Lag Indicators, Co-incident Indicators, Lead Indicators; Interest Rate Views, Currency Exchange Rate, The Deficits: Revenue Deficit and Fiscal Deficit, Current Account Deficit. Investment & Risk Management: Equity, Debt, Alternate assets: Gold & Real Estate. Role of each instrument, risk associated, return expectations

Unit V	Risk Profiling & Asset Allocation: Risk Profiling, Why Asset Allocation, Strategic Asset Allocation, Tactical Asset Allocation, Fixed Asset Allocation, Flexible Asset Allocation, Asset Allocation Returns in Equity and Debt. Fixed Asset Allocation with Annual Re-balancing; Flexible Asset Allocation, Asset Allocation Returns in Equity, Debt and Gold, Diversification in Perspective.
Text Books	
1	IC-38 Published by Insurance Institute of India
2	Insurance and Risk Management by IMS Pro-School
3	Intermediate Module: Wealth Management (NCFM modules)
Reference Books	
1	Wealth Management: Pawan Jhabak, Himalaya Publishing House
2	Wealth Management: Dun & Bradstreet, Mcgraw-Hill Publication
3	Wealth Management: A Treatise & Guide for Wealth Managers and Wealth Management Executives, Prof. George S. Mentz, American Academy of Financial Management
Useful Links	
1	https://nptel.ac.in/courses/110/105/110105144/

	Course Outcomes	**PO**	**CL**	**Class Sessions**
MBA42405(A).1	**Apply** the concept of insurance and its general procedure in practical sphere.	PO1, PO3, PO5	3	8
MBA42405(A).2	**Analyze** various insurance policies on the basis of financial needs and requirements.	PO2, PO4	4	8
MBA42405(A).3	Rating essential elements allied to life and non –life insurance.	PO1 , PO3	5	8
MBA42405(A).4	**Compare** about Wealth Management & the Economy	PO1, PO3, PO5	5	8
MBA42405(A).5	**Built** risk profiling and asset allocation	PO2, PO4	6	8

CO-PO Mapping

PO → / CO ↓	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**
CO1	2	3	3	3	2	2	2
CO2	3	3	2	3	3	3	3
CO3	2	3	3	3	2	2	3

CO4	3	3	2	3	2	3	3
CO5	2	3	3	2	2	2	2
Avg	2	3	3	3	2	2	3

Assessment Pattern (with revised Bloom's Taxonomy)

Knowledge Level	CT 1	CT 2	TA	ESE
Remember	-	-	-	-
Understand	-	-	-	10
Apply	5	5	3	13
Analyze	5	5	3	13
Evaluate	5	2	4	11
Create	-	3	--	13
TOTAL	15	15	10	60

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Program: (M.B.A) Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42405(A)	Insurance & Wealth Management	40	-	-	4

Summary of Revisions in the Contents

Unit No.	Modifications Proposed	Source of collection of proposed content	Reason
1.	Wealth Management & the Economy: Financial Planning to Wealth Management, Economic Cycles and Indicators: Lag Indicators, Co-incident Indicators, Lead Indicators; Interest Rate Views, Currency Exchange Rate, The Deficits: Revenue Deficit and Fiscal Deficit, Current Account Deficit. Investment & Risk Management : Equity, Debt, Alternate assets: Gold & Real Estate. Role of each instrument, risk associated, return expectations	Symbiosis College , Nagpur	Strengthening PO2 , PO5 , PSO1

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Program: Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42406(A)	Quality Toolkit for Managers	40	-	-	4

Pre-Requisites: Operation Management, Quantitative Techniques

Course Objectives:

1.	The student will be able to analyze the dimensions of Quality and apply quality systems for effective quality improvement.
2.	The student will be able to select appropriate statistical tools for quality analysis.
3.	The student will be able to recommend appropriate SPC tools to improve process quality.
4.	The student will be able to set bench marks for the organization and apply TQM tools for quality improvement
5.	The student will be able to apply productivity tools for improving efficiency in the plant.

Course Contents

Unit I	**Introduction to Quality Concepts**: Dimensions of Quality, Cost of Quality, Quality philosophies, Quality systems, contribution of Quality gurus.
Unit II	**Quality Assurance and Control** – Concepts of Quality Assurance, Objectives, Quality Manual, Specification and Design Control, Process control, inspection and testing, Quality assurance in Services
Unit III	**Statistical Process Control (SPC):** 7 tools of quality, control charts for variable and attributes, control chart techniques, X bar, R bar correlation. Pareto diagrams, cause and effect diagrams scatter diagrams, run charts, histograms, and flow charts.
Unit IV	**Quality Improvement Techniques** - Control Charts for Variables – Definitions, Variation: Common vs. Special Causes, Process capability, Concept of six sigma - Introduction, advantages of six sigma, six sigma DMAIC process
Unit V	**Customer satisfaction** – Customer Perception of Quality, Customer Complaints, Service Quality, Customer Retention, Employee Involvement – Motivation, Empowerment, Teams, Recognition and Reward, Performance Appraisal, Benefits, Continuous Process Improvement –Juran Trilogy, PDSA Cycle, 5S, Kaizen, Supplier Partnership – Partnering, sourcing, Supplier Selection, Supplier Rating, Relationship Development, Performance Measures – Basic Concepts, Strategy

Text Books

T.1	Total Quality Management, Text and Cases, By K. Shridhara Bhat, Himalaya Publishing House,
T.2	Quality Management, By Kanishka Bedi, Oxford
T.3	Production and Operations Management, By K.Aswathappa and K. Shridhara Bhat, Himalaya Publidhing House,
Reference Books	
R.1	Operations Management, By B Mahadevan, Pearson Publication,
R.2	Total Quality Management (TQM) 5th edition, Basterfeild & Urdhwareshe, Pearson Education, ISBN-13: 978-9353066314
R.3	Total Quality Management, V. Vijayan & H. Ramakrishna, S. Chand Publishing, ISBN-13: 978-9384319557
Useful Links	
1	https://nptel.ac.in/courses/110/101/110101131/

	Course Outcomes	PO/PSO	CL	Class Sessions
MBA42406(A).1	**Apply** various Quality parameters	PO1, PO2, PO4, PO5, PSO1, PSO2	3	8
MBA42406(A).2	**Analyze** various quality techniques	PO1, PO2, PO4, PO5, PSO1, PSO2	4	8
MBA42406(A).3	**Evaluate** TQM methods for quality management.	PO1, PO2, PO4, PO5, PSO1, PSO2	5	8
MBA42406(A).4	**Explain** Quality Improvement Techniques.	PO1, PO2, PO4, PO5, PSO1, PSO2	4	8
MBA42406(A).5	**Develop** quality tools benchmarking.	PO1, PO2, PO4, PO5, PSO1, PSO2	6	8

CO-PO Mapping

PO → / CO ↓	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2
CO1	3	3	3	3	2	3	3

CO2	3	3	2	3	3	3	3
CO3	2	3	2	2	2	-	3
CO4	3	3	2	3	2	2	3
CO5	3	3	2	2	2	2	2
Avg	**3**	**3**	2	**3**	**2**	**2**	**3**

Assessment Pattern (with revised Bloom's Taxonomy)

Cognitive Level	CT 1	CT 2	TA	ESE
Remember	_	_		
Understand	_	_	_	10
Apply	-	-	-	10
Analyze	5	5	3	13
Evaluate	5	5	4	14
Create	5	5	3	13
TOTAL	15	15	10	60

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Program: Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42406(A)	Quality Toolkit for Managers	40	-	-	4

Summary of Revisions in the Contents

Unit No.	Modifications Proposed	Source of collection of proposed content	Reason
1.	Quality Improvement Techniques	Rajeshree Shahu Maharaj, Pune	To understand the various methods to improve Quality of the product.
2.	Customer satisfaction	Rajeshree Shahu Maharaj, Pune	To learn various quality improve method to satisfy customer

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Program: (M.B.A) Master of Business Administration

Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42407(A)	Internet Marketing	40	-	-	4

Pre-Requisites: Information Technology

Course Objectives:

1.	Students will be able to handle various approaches to internet marketing
2.	Students will be able to compare advantages and disadvantages of approaches to internet marketing
3.	Students will be able to develop skills to implement internet marketing under appropriate situations
4.	Students will be able to determine e- commerce and management system.
5.	Students will be able to determine and demonstrate online promotion techniques.

Course Contents

Unit I	**Introduction:** What is internet marketing? Significance of internet marketing, benefits of internet to the marketer, how internet marketing differs from traditional marketing Marketplace, customers, online buyer behavior, competitors, suppliers, intermediaries Websites: People behind websites- owners, venture capitalists, creative directors, account and project managers, programmers, graphic designers, copy writers, marketers Types of websites- web portals, B2B, B2C, C2C, B2E (Business to employee), social networking, informational, entertainment
Unit II	**Social Media And Social Networking Sites:** An overview of social media and networking sites, The rise and dominance of social networking- Social media optimization, social media marketing Who is using social media and how? Social networking sites- types of audiences, generalist social networking, Niche market social networking, social bookmarking Blogging as a marketing strategy: Blogging basics- What is blogging? Types of blogs, who blogs, who reads them, how and why. Blogging as a marketing strategy- Benefits of blogging, pitfalls of blogging, the requirements for a successful marketing blog
Unit III	**Web Based Video:** Who is watching what, video as a social media tool, web based video as a marketing tool Wikis , RSS, Mash ups , virtual worlds and marketing Web and brand building - Brand – brand promise, brand personality, unique selling proposition, The web's place in brand building
Unit IV	**E- Commerce Sites: sources of revenue** - direct sales, indirect sales, paid memberships and Subscriptions, advertising Shopping on the social web- store layout, the shopping cart and check out process, intuitive and personal content provision, Feedback and reviews

Unit V	**Online Promotion Techniques:** Search engine marketing, online PR, Online partnerships, interactive advertising, e-mail marketing, viral marketing
Text Books	
1	Principles of Internet Marketing- new tools and methods for web developers by Jason I. Miletsky, Course Technology, Cengage Learning, 2009
Reference Books	
1	Internet marketing- strategy, implementation and Practice- David Chaffey, Fiona Ellis-Chadwick, Richard Meyer, Kevin Johnston, Pearson Education Limited, 2006
2	The ultimate Web- Marketing Guide- Michael Miller, Pearson Education (QUE) , 2011
Useful Links	
1	www.interdigitalmarketing.com/

	Course Outcomes	**PO**	**CL**	**Class Sessions**
MBA42407(A).1	**Handle** various approaches to Internet Marketing	PO1, PO2	3	8
MBA42407(A).2	**Compare** advantages and disadvantages of approaches to Internet Marketing	PO3, PO5, PO4	5	8
MBA42407(A).3	**Develop** skills to implement Internet Marketing under appropriate situations	PO1, PO3, PO5	4	8
MBA42407(A).4	**Determine** E- Commerce and management system.	PO2, PO4	3	8
MBA42407(A).5	**Determine** and demonstrate online promotion techniques.	PO1, PO2, PO5	4	8

CO-PO Mapping

PO → / CO ↓	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**
CO1	2	2	3	2	2
CO2	3	3	2	2	2
CO3	3	3	2	3	3
CO4	2	3	3	2	2
CO5	3	2	3	2	2

Assessment Pattern **(with revised Bloom's Taxonomy)**

Knowledge Level	**CT 1**	**CT 2**	**TA**	**ESE**
Remember	-	-	-	**10**
Understand	-	-	-	**10**
Apply	**5**	**5**	**3**	**13**

Analyze	**5**	**5**	**3**	**13**
Evaluate	**5**	**5**	**4**	**14**
Create	**-**	**-**	**-**	**-**
TOTAL	**15**	**15**	**10**	**60**

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Semester	Course Code	Name of Course	L	T	P	Credits
IV	MBA42407(A)	Internet Marketing	40	-	-	4

Summary of Revisions in the Contents

Unit No.	Modifications Proposed	Source of collection of proposed content	Reason
1.	**E- Commerce Sites:**sources of revenue - direct sales, indirect sales, paid memberships and Subscriptions, advertising Shopping on the social web- store layout, the shopping cart and check out process, intuitive and personal content provision, Feedback and reviews	AICTE Model Curriculum	Strengthen **PO-4 PO-5**
2.	Social networking sites- types of audiences, generalist social networking, Niche market social networking, social bookmarking Blogging as a marketing strategy: Blogging basics- What is blogging? Types of blogs, who blogs, who reads them, how and why. Blogging as a marketing strategy- Benefits of blogging, pitfalls of blogging, the requirements for a successful marketing blog	Sandip University	Strengthen **PO-3 PO-2**

Program: Master of Business Administration					
Semester - IV	MBA42403(B) **Industrial Relations And Labor Legislations**				
Teaching Scheme			**Examination Scheme**		
Theory	4 Hrs/week		**CT-I**	15 Marks	
Tutorial	-		**CT-II**	15 Marks	
Total Credits	**4**		**CA**	10 Marks	
Duration of ESE: 3 Hrs.			**ESE**	60 Marks	
Pre-Requisites : Human Resource Management, Organizational Behavior			**Total Marks**	**100 Marks**	

Course Contents

Unit I	**Industrial Relations:** Concept of IR, Background to IR, Evolution of IR in India. Trade Unions: Concept of Trade Unions, Trade Union Movement in India, Employers' Associations, Functions of Trade Unions, Types & Structure of Trade Unions
Unit II	**Industrial Conflicts:** Concept of Industrial Conflicts/ Disputes, Classification of Industrial Dispute, Causes & Impact of Industrial Dispute, Strikes & Lockouts, Sexual Harassment: Legal Perspective
Unit III	**Collective Bargaining:** Definition, importance, types, prerequisites of effective collective Bargaining & Collective Bargaining in India; Workers Participation: Concept & meaning, Aims & objective, Forms & levels of participation, conditions essential of working of the scheme.
Unit IV	**Wage Legislations:** Payment of Wages Act 1936, Minimum Wages Act 1948, Payment of Bonus Act 1965
Unit V	**Social Security Legislations:** Workman"s Compensation Act 1923 , Employees State Insurance Act 1948, Employees Provident Fund Act 1952, Payment of Gratuity Act 1972, Maternity Benefit Act, 1961

Text Books

T.1	Mamoria Gankar Dynamics of IR, Himalaya Publishing House
T.2	B.D. Singh Industrial Relations & Labour Legislations, Excel Publications.

Reference Books

R.1	A M Sarma, Industrial Jurisprudence and Labour Legislation, Himalaya Publishing
R.2	P.K.Padhi, House Labour & Industrial Legislation, Prentice Hall India.

Useful Links

1	https://nptel.ac.in/courses/110/101/110101153/

	Course Outcomes	CL	Class Sessions
MBA42403(B).1	**Acquire** current Industrial Relation Legislative Proposals and Impact of Labor Laws on Human Resource Management.	3	8
MBA42403(B).2	**Determine** the Industrial Conflicts.	4	8
MBA42403(B).3	**Discuss** the importance and practices to be adopted for workers participation and Collective Bargaining.	3	8
MBA42403(B).4	**Design** Wage legislation.	3	8
MBA42403(B).5	**Explain** social security legislations.	6	8

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Program: Master of Business Administration

Semester - IV | MBA42404(B) International Marketing Management

Teaching Scheme		Examination Scheme	
Theory	4 Hrs/week	**CT-I**	15 Marks
Tutorial	-	**CT-II**	15 Marks
Total Credits	**4**	**CA**	10 Marks
Duration of ESE: 3 Hrs.		**ESE**	60 Marks
Pre-Requisites: Organization Management, Marketing Management, Business Ethics, International Business		**Total Marks**	**100 Marks**

Course Contents

Unit I	**Introduction of International Marketing** - Definition, Features of International Marketing, Basis of International Marketing, Trends in International Marketing, Issues in transcending International Boundaries, Intellectual Property Protections.
Unit II	**Planning for International Marketing** - Introduction, Global Marketing a Need of the Day, International Marketing Plan, Mode of Payment, Methods of Payment on Import, Consignment Purchase, Cash in Advance (Pre-payment), Down Payment, Open Payment, Documentary Collections, Letter of Credit
Unit III	**International Marketing Mix** - Identification of Market, Consumer Index , Global Product policy Decisions, promotion, pricing, distribution strategy
Unit IV	**International Service Sector Marketing** – Introduction, GATS Principles, Standardization of International Services, Service Quality, Measurement of Service Quality, International Direct Marketing & Social Media Marketing
Unit V	**Global Branding** - Attributes, Benefits, Values, Culture, Personality, User, Global Brand Development, Implication of Brand Equity concept, Global Branding opportunities and challenges.

Text Books

T.1	. International Marketing, 2nd Edition, Rakesh Mohan Joshi, Oxford University PressISBN-13: 978-019807702
T.2	International Marketing, 4thEdition, R. Srinivasan, PHI Learning, ISBN-13: 978-8120352384
T.3	Global Marketing Management, 8e, Warren J Keegan, Pearson Education, ISBN-13: 978-933258432

Reference Books

R.1	International Marketing Management, Subhash Jain, CBS; 3 edition, ISBN-13: 978-8123912752
R.2	Ambrish Gupta: “Financial Accounting Management an Analytical Perspective”,Pearson Education-2009
R.3	Sehgal, “Accounts for Management”, Taxman Publication Pvt. Ltd

Useful Links

1	https://nptel.ac.in/courses/110/101/110101131/

	Course Outcomes	CL	Class Sessions
MBA42404(B).1	**Differentiate** between domestic marketing and international marketing and understand clearly features of International Marketing	3	8
MBA42404(B).2	**Explain** the planning, & various procedures in International marketing.	4	8
MBA42404(B).3	**Develop** Global Product Policy decisions	6	8
MBA42404(B).4	**Design** strategies for International Service Sector Marketing	6	8
MBA42404(B).5	**Design** functional level strategies for Global Branding.	6	8

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Program: Master of Business Administration

Semester - IV	**MBA42405 (B):** Financial Derivatives & Corporate Taxation

Teaching Scheme		Examination Scheme	
Theory	4 Hrs/week	**CT-I**	15 Marks
Tutorial	-	**CT-II**	15 Marks
Total Credits	**4**	**CA**	10 Marks
Duration of ESE: 3 Hrs.		**ESE**	60 Marks
Pre-Requisites: Financial Management		**Total Marks**	**100 Marks**

Course Contents

Unit I	**Definition of Income & Assessee**: Previous year, Assessment year, Residential status, Gross total income, Total taxable income under five heads, Agricultural income, simple problems on computation of taxable income under the head salary
Unit II	**Income from Business & Profession**: Distinction between capital and revenue receipts capital & revenue expenditure, Computation of income under the head Business & Profession (company assesses only).
Unit III	**Income from capital gains & other sources**: Meaning & computation of income from capital gains and income from other sources (relating to company assessee only).
Unit IV	**Income exempt from tax**: Tax rebates, types of companies recognized by Income Tax Act, Deductions relating to company assessee of chapter VI., TDS, Filing of return,.
Unit V	**Tax planning**: Set off & Carry forward of losses, Advanced tax, MAT, Self assessment tax., GST: Meaning and definition, taxable event of GST, Constitutional provision, levy and collection, composite scheme, time of supply, place of supply, valuation, input tax credit, registration, reverse charge mechanism, return. Computation of tax liability.

Text Books

T.1	Ahuja, & Gupta, (2015). Systematic Approach to Income Tax, Bharat Law House
T.2	V. S Datey, (2015) Indirect Taxes, Taxmann Publications

Reference Books

R.1	Bhagwati Prasad, (2015). Direct Taxes Law & Practice, WishwaPrakashan
R.2	V. K., Singhania, Kapil Singhania, Monica Singhania, (2015). Students guide to Direct Taxes, Taxmann Publications

Useful Links

1	https://nptel.ac.in/courses/110/105/110105156/

	Course Outcomes	CL	Class Sessions
MBA42405(B).1	Apply the concepts and laws of direct and indirect taxes in practical life.	3	8
MBA42405(B).2	Compute the amount of tax under the various heads of direct tax.	4	8
MBA42405(B).3	Analyze the impact of tax imposition on financial position of business	4	8
MBA42405(B).4	Evaluate the tax planning and tax assessment for formulating the financial policies of the organization.	5	8
MBA42405(B).5	Discuss about taxation policy and GST	6	8

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Program: Master of Business Administration

Semester - IV | **MBA42406(B)**: Transportation and Operation Planning

Teaching Scheme		Examination Scheme	
Theory	4 Hrs/week	**CT-I**	15 Marks
Tutorial	-	**CT-II**	15 Marks
Total Credits	**4**	**CA**	10 Marks
Duration of ESE: 3 Hrs.		**ESE**	60 Marks
Pre-Requisites: Operation Management, Quantitative Techniques, Operation Research, Logistic and supply chain Management		**Total Marks**	**100 Marks**

Course Contents

Unit I	**Transportation**: Fundamental of transportation, Relationship of transportation to other business functions, Modes of transportation, Transport mode selection, methods – transport costs, transport regulations, intra and interstate transport of goods. Transport Industry in India, Trends in Modern Transport, Transport organization: Functions, structure, and hierarchy.
Unit II	**Channels of distribution:** Distribution Channels, channel functions – channel structure – designing distribution channel – choice of distribution channels – factors effecting choice of distribution channels. Functions of intermediaries, types of intermediaries, variables in selecting channel members, motivating, training, evaluating channel members, modifying channel arrangements.
Unit III	**Physical Distribution**: Definition, Need and functions of physical distribution, Factors affecting physical distribution, A system perspective. Physical distribution trends in India, – rising costs& need for control, Cost reduction Opportunities, complexities of physical distribution, conflict resolution Information Technology for Supply Chain: History, concept and need for IT, IT application for supply chain, Enabling supply chain through IT, Service oriented architecture (SOA), RFID
Unit IV	**Aggregate Planning** – Need for Aggregate Production planning, Capacity adjustments, Basic Strategies, Level and Chase Strategies MPS and MRP – Concepts of MPS and MRP, Bill of Materials, Capacity requirement planning, Relation between MPS,CRP and MRP
Unit V	**Distribution Planning** – Sales Orders, Lead time considerations, Inventory analysis and distribution planning, Use of ERP Green Logistics: Environment Sustainability, rhetoric and reality Model, measuring the environmental impact of freight transport EURO and BS -6 norms, Arguments for and against the internalization of environmental costs, Monetary valuation of environmental costs.

Text Books

T.1	Basics of distribution management: a logistics approach by satish k. Kapoor, purvakansal
T.2	Logistics and Supply Chain Management, MacMillan 2003, 1st Edition

Reference Books

R.1	Logistics Operations and Management: Concepts and Models edited by Reza Farahani, Shabnam Rezapour, Laleh Kardar
R.2	Green Logistics: Improving the Environmental Sustainability of Logistics edited by Alan Mc Kinnon, Michael Browne, Anthony Whiteing, Maja Piecyk

Useful Links	
1	https://nptel.ac.in/courses/110/101/110101131/

	Course Outcomes	PO/PSO	CL	Class Sessions
MBA42406(B).1	Discover the importance of logistics in the formation of business strategy and the conduct of supply chain operations.	PO1, PO2, PO4, PO5, PSO1, PS O2	3	8
MBA42406(B).2	Evaluate various cost measures in transportation techniques.	PO1, PO2, PO4, PO5, PSO1, PS O2	5	8
MBA42406(B).3	Determine the factors of physical distribution.	PO1, PO2, PO4, PO5, PSO1, PS O2	5	8
MBA42406(B).4	Examine the use of information technology in different areas in logistics management.	PO1, PO2, PO4, PO5, PSO1, PS O2	4	8
MBA42406(B).5	Analyze the need of recent trends in logistics like Green logistics.	PO1, PO2, PO4, PO5, PSO1, PS O2	4	8

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Program: Master of Business Administration

Semester - IV	MBA42407(B) Web Designing & Multimedia

Teaching Scheme		Examination Scheme	
Theory	4 Hrs/week	**CT-I**	15 Marks
Tutorial	-	**CT-II**	15 Marks
Total Credits	**4**	**CA**	10 Marks
Duration of ESE: 3 Hrs.		**ESE**	60 Marks
Pre-Requisites: Information Technology		**Total Marks**	**100 Marks**

Course Contents

Unit I	Multimedia and hypermedia, world wide web, overview of multimedia software tools. Graphics and image data representation graphics/image data types, file formats, Color in image and video: color science, color models in images, color models in video.
Unit II	Fundamental concepts in video and digital audio Types of video signals, analog video, digital video, digitization of sound, MIDI, quantization and transmission of audio.
Unit III	HTML - tags, lists, tables, Frames, layers, using images in web pages and DHTML
Unit IV	Introduction in VB Script - Data types, operators, control structures, functions and strings.
Unit V	Introduction to java script - Operators, identifiers, control structures, functions arrays anderror handling.

Text Books

T.1	Mastering HTML- CYBEX Publication

Reference Books

1	Complete Reference VB Script and Java Script – Tata McGraw Hill Dynamic HTML- O'Reilly Media Internet & Web Technologies- Tata McGraw-Hill Education

Useful Links

	1	www.w3school.com

	Course Outcomes	PO	CL	Class Sessions
MBA42407(B).1	**Acquire** technical competence in Web Designing and Multimedia Applications	PO1, PO2, PO4	3	8
MBA42407(B).2	**Execute** use of HTML, VB Script and Java script	PO3, PO5,	5	8

MBA42407(B).3	**Integrate** Web and Multimedia with business objectives of the organization	PO1, PO3, PO5	4	8
MBA42407(B).4	**Build** out the VB script.	PO2,PO4, PO5	6	8
MBA42407(B).5	**Acquire** technical competence in Web Designing and Multimedia Applications	PO1, PO2	6	8

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Program: Master of Business Administration

Semester-IV	MBA42408 (A) **Data Mining & Knowledge Discovery**		
Teaching Scheme		**Examination Scheme**	
Theory	4Hrs/week	**CT-I**	15 Marks
Tutorial	-	**CT-II**	15 Marks
Total Credits	**4**	**CA**	10 Marks
Duration of ESE: 3Hrs.		**ESE**	60 Marks
Pre-Requisites: Introduction to Business Analytics		**Total Marks**	**100 Marks**

Course Objectives:

1. Understand the fundamental concepts, processes, and applications of data mining and knowledge discovery in databases.
2. Apply data preprocessing, cleaning, transformation, and reduction techniques to prepare raw data fo mining tasks.
3. Implement key data mining algorithms for classification, clustering, association rule mining, and prediction using analytical tools.
4. Analyze mined patterns and discovered knowledge to support strategic business decisions across various functional areas.
5. Evaluate the performance, accuracy, and suitability of different data mining models and techniques real-world business problems.

	Course Contents
UnitI	**Introduction to Data Mining & KDD**- Concept of Data Mining and Knowledge Discovery in Databases (KDD)- Steps in KDD: Selection, Preprocessing, Transformation, Data Mining, Evaluation - Types of data: structured, unstructured, transactional - Data mining functionalities: classification, clustering, association, anomaly detection - Applications of data mining in business, marketing, finance, healthcare.
Unit II	**Data Preprocessing & Data Warehousing** - Data quality issues: missing values, noise, outliers. - **Data cleaning**: handling missing data, smoothing, outlier detection - **Data transformation**: normalization, discretization, concept hierarchies - **Data reduction**: PCA, sampling, dimensionality reduction- **Overview of data warehouses**: OLAP operations, star/snowflake schema.
Unit III	**Association Rule Mining** - Market Basket Analysis - Concepts: support, confidence, lift, conviction - Apriori algorithm: candidate generation, pruning - FP-Tree and FP-Growth algorithm - Mining multilevel and multidimensional association rules - Applications in retail, cross-selling, promotional strategy
Unit IV	**Classification Techniques**- Decision Tree classification (ID3, C4.5, CART) - Bayesian Classification: Naïve Bayes -k-Nearest Neighbor (k-NN) classification - Rule-based classifiers - Model evaluation metrics: confusion matrix, accuracy, precision, recall, F1, ROC, AUC - Case studies in credit scoring, fraud detection, churn prediction.

UnitV	**Clustering & Applications of Data Mining**- Clustering concepts and requirements - Partitioning methods: k-Means, k-Medoids - Hierarchical clustering: agglomerative, divisive - Density-based clustering: DBSCAN - Outlier and anomaly detection - Business applications: customer segmentation, recommender systems, risk analytics - Ethical issues in data mining and privacy concerns.
TextBooks	
T.1	Jiawei Han, Micheline Kamber, and Jian Pei — *Data Mining: Concepts and Techniques*
T.2	Ian H. Witten, Eibe Frank, Mark A. Hall — *Data Mining: Practical Machine Learning Tools and Techniques*
ReferenceBooks	
R.1	Pang-Ning Tan, Michael Steinbach, Vipin Kumar — *Introduction to Data Mining*
R.2	Margaret H. Dunham — *Data Mining: Introductory and Advanced Topics*
UsefulLinks	
1	https://nptel.ac.in/courses/109105198

	Course Outcomes	CL	Class Sessions
MBA42408A.1	Explain the fundamental concepts of Data Mining and the Knowledge Discovery in Databases (KDD) process, including data types, data quality issues, and major data mining tasks.	2	8
MBA42408A.2	Apply data preprocessing techniques such as cleaning, transformation, reduction, and integration to prepare datasets for mining and analytical modeling.	3	8
MBA42408A.3	Analyze data using association rule mining, classification, and clustering techniques, and interpret results to support managerial decision-making.	4	8
MBA42408A.4	Evaluate different data mining models and algorithms using performance metrics such as accuracy, lift, confidence, precision, recall, ROC, and cluster validity indices.	5	8
MBA42408A.5	Design a data mining solution for a business problem by selecting appropriate techniques and tools, and demonstrate ethical and responsible use of data in analytics.	6	8

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Program: Master of Business Administration

Semester-IV | MBA42408 (B) | **Big Data Analytics**

Teaching Scheme		Examination Scheme	
Theory	4Hrs/week	**CT-I**	15 Marks
Tutorial	-	**CT-II**	15 Marks
Total Credits	**4**	**CA**	10 Marks
Duration of ESE: 3Hrs.		**ESE**	60 Marks
Pre-Requisites: Introduction to Business Analytics		**Total Marks**	**100 Marks**

Course Objectives:

1.	To introduce students to the concepts, characteristics, and challenges of Big Data and enable them to understand the need for advanced data processing technologies.
2.	To develop the ability to use Big Data tools and frameworks such as Hadoop, HDFS, MapReduce, Spark, and NoSQL for large-scale data storage and processing.
3.	To train students to apply data preprocessing, data mining, and analytical techniques for extracting meaningful patterns and insights from complex datasets.
4.	To enable learners to design and implement Big Data solutions for real-world business and industry problems using appropriate analytical methodologies.
5	To equip students with hands-on skills for working with Big Data environments, emphasizing scalability, performance optimization, and real-time analytics.

Course Contents

Unit I	**Introduction to Big Data**: Definition, evolution, characteristics of Big Data (Volume, Velocity, Variety, Veracity, Value). - Types of Big Data: structured, semi-structured, unstructured. - Sources of Big Data: social media, sensors, logs, transactions - Challenges in Big Data management. - Introduction to Data Science lifecycle in Big Data context.
Unit II	**Hadoop Ecosystem & HDFS Architecture** - Introduction to Hadoop and its components - HDFS (Hadoop Distributed File System): architecture, Name Node, Data Node - Data replication, fault tolerance, block size, rack awareness - Hadoop 1.x vs 2.x (YARN architecture).- Hadoop ecosystem overview: Hive, Pig, HBase, Sqoop, Flume, Oozie, Zookeeper.
Unit III	**MapReduce & NoSQL Databases -** MapReduce programming model: map, shuffle, reduce phases. - Use cases of MapReduce in analytics. Limitations of MapReduce and evolution towards distributed frameworks - Introduction to NoSQL databases: key-value, columnar, graph, document-based.- MongoDB, Cassandra, HBase – concepts and business applications.
Unit IV	**Apache Spark & Real-Time Data Processing:** Introduction to Apache Spark: RDDs, Data Frames, Spark SQL - Spark vs Hadoop MapReduce - Spark MLlib for machine learning.-Streaming analytics: Apache Spark Streaming, Kafka basics - Real-time analytics use cases in retail, finance, telecom.

Unit V	**Big Data Application, Governance & Ethics :** Big Data applications in marketing, finance, supply chain, healthcare, HR analytics. - Big Data visualization (Tableau, Power BI) - Data governance in
	Big Data: quality, lineage, privacy - Ethical issues: data security, transparency, GDPR considerations - Capstone mini project: analyzing a large dataset using Hadoop/Spark tools.
TextBooks	
T.1	Tom White – *Hadoop: The Definitive Guide*, O'Reilly.
T.2	Seema Acharya, Subhashini Chellappan – *Big Data and Analytics*.
ReferenceBooks	
R.1	Rajkumar Buyya – *Big Data: Principles and Paradigms*.
R.2	Benjamin Bengfort – *Data Analytics with Hadoop*.
UsefulLinks	
1	Free Hadoop course

	Course Outcomes	CL	Class Sessions
MBA42408B.1	Explain the fundamental concepts, characteristics, and challenges of Big Data, including the 5Vs, data types, and Big Data lifecycle.	2	8
MBA42408B.2	Apply Hadoop ecosystem tools and HDFS concepts to manage and store large-scale datasets in distributed environments.	3	8
MBA42408B.3	Analyze large datasets using MapReduce, NoSQL databases, and Spark frameworks to derive meaningful insights for business decision-making.	4	8
MBA42408B.4	Evaluate different Big Data technologies and processing models (batch, real-time, in-memory) for their applicability to business scenarios.	5	8
MBA42408B.5	Design Big Data analytics solutions using Hadoop/Spark and NoSQL tools, ensuring responsible data governance, privacy, and ethical considerations.	6	8