



Amrutvahini Sheti and Shikshan Vikas Sanstha's
AMRUTVAHINI COLLEGE OF ENGINEERING,
SANGAMNER

(An Autonomous Institute)

Sangamner, Dist- Ahilyanagar, Maharashtra, India. 422608



Permanently Affiliated to

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

Syllabus

MBA 2025 Pattern

**Choice Based Credit and Grading System (CBCGS) and Outcome
Based Education Framework
aligned with National Education Policy (NEP) 2020**

for

MBA

(Master of Business Administration)

2 years, 4 semesters full time Post-Graduate Program

MBA 1st year effective from AY 2025 – 26

MBA 2nd year effective from AY 2026 – 27




Chairman
BoS, Master of Business Administration
Amrutvahini College of Engineering, Amrutnagar
Sangamner-422608


Chairman
Academic Council
Amrutvahini College of Engineering, Amrutnagar
Sangamner-422608

ANNEXURE - I**LIST OF COURSES OFFERED IN EACH SEMESTER**

Semester I						
Type	Code	Course	Cr.	CCE	ESE	Marks
Programme Core Course						
Compulsory	R25-MBA-PCC-101	Accounting for Business Decisions	3	50	50	100
Compulsory	R25-MBA-PCC-102	Business Economics	3	50	50	100
Compulsory	R25-MBA-PCC-103	Organizational Behavior and Development	3	50	50	100
Compulsory	R25-MBA-PCC-104	Principles of Marketing	3	50	50	100
Compulsory	R25-MBA-PCC-105	Indian Knowledge Systems	2	0	50	50
Compulsory	R25-MBA-PCC-106	Foundations of Entrepreneurship	2	0	50	50
Research Methodology course						
Compulsory	R25-MBA-RSM-107	Business Research Methods	3	50	50	100
Programme Elective Course (any ONE)						
Elective	R25-MBA-PEC-108	Business Computer Skills	2	50	0	50
Elective	R25-MBA-PEC-109	Management Fundamentals	2	50	0	50
Elective	R25-MBA-PEC-110	Rural and Agri-business Management	2	50	0	50
Elective	R25-MBA-PEC-111	Personality Development	2	50	0	50
Semester I Total			08	21	300	350
CivicTech Skills Course (Additional course)						
Compulsory	R25-MBA-CTS-120	Human Rights-I	-	-	-	-

Semester II						
Type	Code	Course	Cr.	CCE	ESE	Marks
Programme Core Course						
Compulsory	R25-MBA-PCC-201	Marketing Management	3	50	50	100
Compulsory	R25-MBA-PCC-202	Financial Management	3	50	50	100
Compulsory	R25-MBA-PCC-203	Human Capital Planning and Development	3	50	50	100
Compulsory	R25-MBA-PCC-204	Operations and Supply Chain Management	3	50	50	100
Compulsory	R25-MBA-PCC-205	Decision Science	3	50	50	100
Compulsory	R25-MBA-PCC-206	New Venture Management	2	0	50	50
Project/OJT course						
Compulsory	R25-MBA-RSM-207	Desk Research	3	50	50	100
Programme Elective Course (any ONE)						
Elective	R25-MBA-PEC-208	Business Laws	2	50	0	50
Elective	R25-MBA-PEC-209	Business Communication	2	50	0	50
Elective	R25-MBA-PEC-210	Business Environment	2	50	0	50
Elective	R25-MBA-PEC-211	Holistic Career Management	2	50	0	50
Semester II Total			08	22	350	350
CivicTech Skills Course (Additional courses)						
Compulsory	R25-MBA-CTS-220	Human Rights-II	-	-	-	-
Compulsory	R25-MBA-CTS-221	Introduction to Cyber Security	-	-	-	-

Semester III						
Type	Code	Course	Cr.	CCE	ESE	Marks
Programme Core Course						
Compulsory	R25-MBA-PCC-301	Strategic Management	3	50	50	100
Compulsory	R25-MBA-PCC-302	Life and legacy of Chhatrapati Shivaji Maharaj	2	00	50	50
Project/OJT Course						
Compulsory	R25-MBA-PRJ-303	On the Job Training	8	100	100	200
Programme Elective Course (any ONE)						
Elective	R25-MBA-PEC-304	Business Analytics	3	50	50	100
Elective	R25-MBA-PEC-305	Digital Business	3	50	50	100
Elective	R25-MBA-PEC-306	International Business Management	3	50	50	100
Special Core course -Specialization specific						
Compulsory	-	Special Core course	3	50	50	100
Special Elective course -Specialization specific (any TWO)						
Elective	-	Special Elective course	3	50	50	100
Elective	-	Special Elective course	3	50	50	100
Elective	-	Special Elective course	3	50	50	100
Elective	-	Special Elective course	3	50	50	100
Semester III Total		07	25	350	400	750
CivicTech Skills Course (Additional courses)						
Compulsory	R25-MBA-CTS-320	Skill Development-I	-	-	-	-
Compulsory	R25-MBA-CTS-321	Introduction to Constitution	-	-	-	-

Semester IV						
Type	Code	Course	Cr.	CCE	ESE	Marks
Programme Elective Course (any TWO)						
Elective	R25-MBA-PEC-401	Business Ethics and Governance	3	50	50	100
Elective	R25-MBA-PEC-402	CSR and Sustainability	3	50	50	100
Elective	R25-MBA-PEC-403	Current Trends in Management	3	50	50	100
Elective	R25-MBA-PEC-404	Enterprise Performance Management	3	50	50	100
Project/OJT Course						
Compulsory	R25-MBA-PRJ-405	Masters Project	6	50	50	100
Special Core course -Specialization specific						
Compulsory	-	Special Core course	3	50	50	100
Special Elective course -Specialization specific (any THREE)						
Elective	-	Special Elective course	3	50	50	100
Elective	-	Special Elective course	3	50	50	100
Elective	-	Special Elective course	3	50	50	100
Elective	-	Special Elective course	3	50	50	100
Elective	-	Special Elective course	3	50	50	100
Semester IV Total			07	24	350	350
CivicTech Skills Course (Additional course)						
Compulsory	R25-MBA-CTS-420	Skill Development-I	-	-	-	-

ANNEXURE - II

LIST OF COURSES OFFERED UNDER EACH SPECIALIZATION

MARKETING MANAGEMENT (MKT)						
Specialization Courses						
Semester III						
Type	Code	Course	Cr.	CCE	ESE	Marks
Special Core course						
Compulsory	R25-MBA-SCC-307MKT	Services Marketing	3	50	50	100
Special Elective course (any TWO)						
Elective	R25-MBA-SEC-308MKT	Consumer Behaviour	3	50	50	100
Elective	R25-MBA-SEC-309MKT	Industrial Marketing	3	50	50	100
Elective	R25-MBA-SEC-310MKT	Product and Brand Management	3	50	50	100
Elective	R25-MBA-SEC-311MKT	Customer Relationship Management	3	50	50	100
03			09	150	150	300
Semester IV						
Special Core course						
Compulsory	R25-MBA-SCC-406MKT	Marketing Strategy	3	50	50	100
Special Elective course (any THREE)						
Elective	R25-MBA-SEC-407MKT	Sales and Distribution Management	3	50	50	100
Elective	R25-MBA-SEC-408MKT	Marketing Analytics	3	50	50	100
Elective	R25-MBA-SEC-409MKT	International Marketing	3	50	50	100
Elective	R25-MBA-SEC-410MKT	Marketing 6.0	3	50	50	100
Elective	R25-MBA-SEC-411MKT	Digital Marketing	3	50	50	100
04			12	200	200	400
Specialization Total			07	21	350	350
					700	

FINANCIAL MANAGEMENT (FIN)						
Specialization Courses						
Semester III						
Type	Code	Course	Cr.	CCE	ESE	Marks
Special Core course						
Compulsory	R25-MBA-SCC-307FIN	Advanced Financial Management	3	50	50	100
Special Elective course (any TWO)						
Elective	R25-MBA-SEC-308FIN	Financial Markets and Banking Operations	3	50	50	100
Elective	R25-MBA-SEC-309FIN	Personal Financial Planning	3	50	50	100
Elective	R25-MBA-SEC-310FIN	Digital Banking	3	50	50	100
Elective	R25-MBA-SEC-311FIN	Basics of Fintech	3	50	50	100
			03	09	150	150
			09	150	150	300
Semester IV						
Special Core course						
Compulsory	R25-MBA-SCC-406FIN	International Finance	3	50	50	100
Special Elective course (any THREE)						
Elective	R25-MBA-SEC-407FIN	Goods and Services Tax	3	50	50	100
Elective	R25-MBA-SEC-408FIN	Direct Taxation	3	50	50	100
Elective	R25-MBA-SEC-409FIN	Financial Modeling with Excel	3	50	50	100
Elective	R25-MBA-SEC-410FIN	Strategic Cost Management	3	50	50	100
Elective	R25-MBA-SEC-411FIN	Rural and Micro Finance	3	50	50	100
			04	12	200	200
			12	200	200	400
Specialization Total			07	21	350	350
			21	350	350	700

HUMAN RESOURCE MANAGEMENT (HRM)						
Specialization Courses						
Semester III						
Type	Code	Course	Cr.	CCE	ESE	Marks
Special Core course						
Compulsory	R25-MBA-SCC-307HRM	Strategic Human Resource Management	3	50	50	100
Special Elective course (any TWO)						
Elective	R25-MBA-SEC-308HRM	HR Operations	3	50	50	100
Elective	R25-MBA-SEC-309HRM	Competency Based HRM	3	50	50	100
Elective	R25-MBA-SEC-310HRM	HR Analytics	3	50	50	100
Elective	R25-MBA-SEC-311HRM	Labour Welfare and Employee Well-being	3	50	50	100
		03	09	150	150	300
Semester IV						
Special Core course						
Compulsory	R25-MBA-SCC-406HRM	Employee Relations and Labour Legislations	3	50	50	100
Special Elective course (any THREE)						
Elective	R25-MBA-SEC-407HRM	Organizational Diagnosis and Development	3	50	50	100
Elective	R25-MBA-SEC-408HRM	Compensation and Reward Management	3	50	50	100
Elective	R25-MBA-SEC-409HRM	Performance Management Systems	3	50	50	100
Elective	R25-MBA-SEC-410HRM	HR Policy Design and Governance	3	50	50	100
Elective	R25-MBA-SEC-411HRM	Employee Engagement and Development	3	50	50	100
		04	12	200	200	400
Specialization Total			07	21	350	350
					700	

OPERATIONS AND SUPPLY CHAIN MANAGEMENT (OSCM)						
Specialization Courses						
Semester III						
Type	Code	Course	Cr.	CCE	ESE	Marks
Special Core course						
Compulsory	R25-MBA-SCC-307OSCM	Facilities Management	3	50	50	100
Special Elective course (any TWO)						
Elective	R25-MBA-SEC-308OSCM	Quality Management	3	50	50	100
Elective	R25-MBA-SEC-309OSCM	Logistics Management	3	50	50	100
Elective	R25-MBA-SEC-310OSCM	Industry 4.0	3	50	50	100
Elective	R25-MBA-SEC-311OSCM	Supply Chain Management	3	50	50	100
Total of Sem III			03	09	150	300
Semester IV						
Special Core course						
Compulsory	R25-MBA-SCC-406OSCM	Quality Manufacturing Standards	3	50	50	100
Special Elective course (any THREE)						
Elective	R25-MBA-SEC-407OSCM	Production Planning and Control	3	50	50	100
Elective	R25-MBA-SEC-408OSCM	Services Operations Management	3	50	50	100
Elective	R25-MBA-SEC-409OSCM	Manufacturing Resources Planning	3	50	50	100
Elective	R25-MBA-SEC-410OSCM	Productivity Management	3	50	50	100
Elective	R25-MBA-SEC-411OSCM	Inventory Control Management	3	50	50	100
			04	12	200	400
Specialization Total			07	21	350	700

DATA SCIENCE AND BUSINESS ANALYTICS (DSBA)						
Specialization Courses						
Semester III						
Type	Code	Course	Cr.	CCE	ESE	Marks
Special Core course						
Compulsory	R25-MBA-SCC-307DSBA	Software Project Management	3	50	50	100
Special Elective course (any TWO)						
Elective	R25-MBA-SEC-308DSBA	Business Intelligence	3	50	50	100
Elective	R25-MBA-SEC-309DSBA	Excel for Data Science	3	50	50	100
Elective	R25-MBA-SEC-310DSBA	Data Visualization Lab	3	50	50	100
Elective	R25-MBA-SEC-311DSBA	Machine Learning	3	50	50	100
			03	09	150	150
			09	150	150	300
Semester IV						
Special Core course						
Compulsory	R25-MBA-SCC-406DSBA	Big Data Analytics	3	50	50	100
Special Elective course (any THREE)						
Elective	R25-MBA-SEC-407DSBA	Data Mining	3	50	50	100
Elective	R25-MBA-SEC-408DSBA	Financial Analytics	3	50	50	100
Elective	R25-MBA-SEC-409DSBA	Business Analytics using Python	3	50	50	100
Elective	R25-MBA-SEC-410DSBA	AI for Business	3	50	50	100
Elective	R25-MBA-SEC-411DSBA	Application of Blockchain Technology	3	50	50	100
			04	12	200	200
			12	200	200	400
Specialization Total			07	21	350	350
			21	350	350	700

DETAILED SYLLABUS- MBA-2 YEAR

Semester-III

Semester: III	R25-MBA-PCC-301	Strategic Management
Credits: 03	Total Marks: 100 (50 FA + 50 SA)	Programme Core Course

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
301.1	Remembering	Recall strategic management concepts, terminology, frameworks and emerging trends in business strategy.
301.2	Understanding	Explain strategic management models and their relevance to organizational growth and competitiveness.
301.3	Applying	Apply strategic management tools and techniques for environmental analysis, strategic planning and decision making.
301.4	Analysing	Analyze internal and external business environments, competitive advantage and strategic alternatives.
301.5	Evaluating	Evaluate strategic implementation, control systems, sustainability initiatives and business performance.
301.6	Creating	Design innovative and future-ready business strategies aligned with digital transformation, ESG and global trends.

Unit-1: Foundations of Strategic Management

Concept and evolution of strategic management, levels of strategy – corporate, business and functional, strategic intent, vision, mission and objectives, stakeholder analysis, strategic planning process, strategic thinking and decision making, environmental scanning, ETOP, SWOT and PESTLE analysis, scenario planning, Porter's Five Forces Model, industry life cycle analysis, competitive environment and strategic positioning. Case Study discussion on related topic (8)

Unit-2: Internal Analysis and Competitive Advantage

Resource Based View (RBV), VRIO framework, core competencies and dynamic capabilities, benchmarking, value chain analysis, strategic capability analysis, strategic advantage profile, balanced scorecard, business portfolio analysis - BCG Matrix and GE Nine Cell Model, strategic fit, organizational resilience, digital capabilities and knowledge management. Case Study discussion on related topic sustainable competitive advantage (8+2)

Unit-3: Strategy Formulation and Growth Strategies

Generic competitive strategies - cost leadership, differentiation and focus strategies, growth strategies, diversification, mergers and acquisitions, vertical integration, strategic alliances, turnaround and retrenchment strategies, outsourcing and global strategies, innovation strategy, blue ocean strategy, platform strategy and strategic entrepreneurship. Case Study discussion on related topic (8)

Unit-4: Strategy Implementation and Strategic Control

Strategy implementation process, barriers to implementation, McKinsey 7S framework, Mintzberg's 5Ps, organizational structure and strategic fit, leadership and strategic change management, business continuity planning, corporate governance, organizational culture, reengineering, agile organizations, strategic control systems, KPI, KRA and balanced scorecard approach. Case Study discussion on related topic (8+2)

Unit-5: Emerging Trends in Strategic Management

Digital transformation and AI-driven strategy, sustainability and ESG strategies, triple bottom line approach, startup ecosystems and innovation management, business analytics for strategic decisions, e-commerce and digital business models, virtual value chain, strategic risk management, circular economy, global competitiveness, Industry 5.0 and future trends in strategic management. Case Study discussion on ESG strategy or sustainability and digital transformation (8+1)

Suggested Books:

1. Strategic Management and Business Policy – Azhar Kazmi, Tata McGraw-Hill.
2. Strategic Management – R. Duane Ireland, Robert E. Hoskisson & Michael A. Hitt, Indian Edition, Cengage Learning.
3. Crafting and Executing Strategy: The Quest for Competitive Advantage – Thompson, Strickland, Gamble & Jain, Tata McGraw-Hill.
4. Concepts in Strategic Management and Business Policy – Thomas L. Wheelen & J. David Hunger, Pearson Education.

Reference Books:

1. Strategic Management – Dr. Yogeshwari L. Giri.
2. Competitive Strategy: Techniques for Analyzing Industries and Competitors – Michael E. Porter, First Free Press Edition.
3. Competing for the Future – Gary Hamel & C. K. Prahalad.
4. Blue Ocean Strategy – W. Chan Kim & Renée Mauborgne.

E-Resources

1. SWAYAM / NPTEL Courses on Strategic Management and Business Strategy.
2. Harvard Business Review Case Studies and Articles.
3. Coursera and edX courses on Strategy, Innovation and Sustainability.
4. Industry Reports from McKinsey, Deloitte, PwC and Gartner.

Semester: III	R25-MBA-PCC-302	Life and Legacy of Chhatrapati Shivaji Maharaj
Credits: 2	Total Marks: 50 (00 FA + 50 SA)	Programme Core Course

Course Objectives:

1. Understand the political, social and geographical background of 16th century India and Maharashtra.
2. Explain the life, career and achievements of Chhatrapati Shivaji Maharaj.
3. Analyze administrative, military and naval systems developed by Shivaji Maharaj.
4. Examine diplomatic relations with contemporary Indian and foreign powers.
5. Evaluate the significance of Shivaji Maharaj's governance and legacy.
6. Develop critical thinking through historical sources and film analysis.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
302.1	Remembering	Identify key historical developments and background of the Maratha state.
302.2	Understanding	Understanding Explain major events in the life and career of Shivaji Maharaj.
302.3	Applying	Apply knowledge of administration and military organization to historical analysis.
302.4	Analyzing	Analyze diplomatic relations with Mughals, Adilshahi, Qutbshahi and foreign powers.
302.5	Evaluating	Evaluate governance, economic policies and fort administration system.
302.6	Creating	Develop critical reviews of historical narratives and films related to Shivaji Maharaj.

Unit 1- Background: Political Background of India in the 16th Century; Political Background of Maharashtra; Impact of Geography on History; The Bhosale and Jadhav Families and other noble houses. (5)

Unit 2- Chhatrapati Shivaji Maharaj: Life and Career: Biography from birth to visit to Agra; Biography from Agra visit to 1680. (4+2)

Unit 3- Policies and Diplomacy: Maratha–Adilshahi Relations; Maratha–Mughal Relations; Maratha–Qutbshahi Relations; Relations with foreign powers including British, Portuguese, Siddis, Dutch and French. (5)

Unit 4- State Formation and Governance: Coronation (Shivrajyabhishek) and its significance; Provincial administration; Military administration; Naval administration; Fort administration and conservation; Economic system and revenue administration; Ajnapatra;

Contemporary and later perspectives; Twelve forts with world heritage status; Legacy of Shivaji Maharaj and Maratha War of Independence. (6+2)

Unit 5- Practical Component: Film analysis based on life of Shivaji Maharaj including critical review of Marathi and Hindi films such as works of Bhalji Pendharkar, Digpal Lanjekar, Tanhaji and Chhava. (5+1)

Note: The course should be taught using historical sources, maps, field visits and audio-visual material.

Suggested Text Books:

1. Jadunath Sarkar – Shivaji and His Times
2. G. S. Sardesai – New History of the Marathas
3. Setumadhavrao Pagdi – Shivaji
4. Babasaheb Purandare – Raja Shivchhatrapati

Suggested Reference Books:

1. Stewart Gordon – The Marathas 1600–1818
2. Surendra Nath Sen – Administrative System of the Marathas
3. Govind Sakharam Sardesai – Maratha Riyasat

e-resources:

1. www.indianhistory.ac.in
2. www.archive.org (Historical manuscripts)
3. www.maharashtratourism.gov.in (Fort information)
4. www.britannica.com (Historical reference)

Semester: III	R25-MBA-PRJ-303	On the Job Training (OJT)
Credits: 8	Total Marks: 200 (100 FA + 100 SA)	Project- Compulsory

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
303.1	Remembering	Identify and Describe the fundamental aspects of the organization and industry where the OJT is conducted, including the company's profile, core business activities, and organizational structure.
303.2	Understanding	Explain the relevance and application of theoretical concepts learned in the classroom to real-world business practices observed during the OJT.
303.3	Applying	Utilize relevant theoretical knowledge and technical skills in real-world tasks and projects during the OJT in a professional setting.
303.4	Analyzing	Examine and break down the problems or tasks undertaken during the OJT, identifying the key issues, underlying causes, and possible solutions.
303.5	Evaluating	Assess the effectiveness of the strategies and solutions implemented during the OJT, from the standpoint of utility to the host organization, the feedback from the industry mentor.
303.6	Creating	Develop a comprehensive OJT report and presentation that integrates the learning experiences, data collected, analysis, and outcomes of the project, demonstrating a clear connection between academic knowledge and practical application.

Each student shall undertake **On the Job Training (OJT)**, immediately after the end of Semester II and before the commencement of the Semester III. OJT shall have functional focus in the area of specialization selected by the student.

OJT aims to bridge the gap between theoretical knowledge gained in the classroom and practical application in a real-world environment. It also aims to equip students with both technical and non-technical skills that are essential for success in the industry. It is expected that the OJT shall sensitize the students to the demands of the workplace and apply conceptual knowledge in practice.

Guidelines for the OJT:

A. Nature of the OJT-

1. OJT is SPECIALIZATION specific course.
2. OJT shall be of 12 weeks (approx. 3 months).
3. 8 weeks (approx. 2 months) of training in the organization with 35 hours of work per week (before the commencement of the Third Semester.)

4. 4 weeks (approx. 1 month) of pre and post training work including proposal making, analysis, report preparation and etc.
5. OJT must be conducted outside the Amrutvahini Santha to expose students to real-world work environments.
6. OJT must be done individually. Group project is not permitted.
7. OJT should involve fieldwork/desk work/task work in the organization. Virtual OJT is not permitted. (except organization or its entity located outside India)
8. OJT can be done based on primary and/or secondary data.
9. OJT can involve surveys, interviews, case studies, observation studies, statement analysis, etc.
10. It is mandatory for the student to seek advance approval from the faculty mentor about the type of work and organization before commencing the OJT.

B. Permissible Partner Organizations-

1. Any company registered under Companies Act or its subsidiary/Units in India.
2. Any company/Establishment located outside India OR its task in India.
3. Government / Semi-Government Undertaking / PSU establishment/ Government Offices and branches.
4. Start Ups/ Family business with an existence of 5 years or more and having working manpower more than 30.
5. Financial Institutions/ Cooperative Societies / NGOs/ Trust with an existence of 5 years or more.
6. Consulting or Research Organizations with an existence of 5 years or more.
7. Micro, Small and Medium enterprises defined under MSME with an existence of 5 years or more.
8. Establishment like dealer, supplier, and franchisee having working manpower more than 30 and associated with reputed company.

C. OJT Guide and Mentor-

Each student shall be assigned one guide who is a faculty from the college. In addition, student must communicate details of a Mentor from the host organization where the student undertakes the OJT, to the faculty guide in college. Mentor from company and Faculty guide's communication is essential to understand students' progress and performance.

The Mentor in company plays a crucial role in guiding the student during the internship. They ensure that the intern fulfills the requirements of the organization and successfully meets the demands of the assigned project. Through expertise and experience, they provide valuable insights into real-world practices and industry expectations.

The faculty guide serves as the overall coordinator of the OJT program of the assigned / allotted students. They oversee the entire internship process and evaluate the quality of the OJT in a consistent manner across all the assigned students. The faculty guide ensures that the OJT aligns with the MBA program's objectives and provides valuable learning opportunities. They also facilitate communication between the institution, company mentor, and student to ensure a fruitful OJT experience.

D. Progress and Submission of OJT-

Letter of Intent: Student may submit Letter of Intent to company, issued by college, if required.

OJT Progress diary: Each student shall maintain the OJT Progress Diary detailing the work carried out and the progress achieved on a weekly basis. Entries to be done giving a very brief account of the learning/activities/ tasks / interaction taken place.

OJT report: A student is expected to make a report based on the OJT he/she has done in an organization/company. The student shall submit **TWO hard copies** (*ONE black bound copy and ONE Spiral bound copy*) of the report. ONE black bound copy of the report is to be returned to the student and ONE Spiral bound copy to be retained by the college after the external viva-voce. Copies of the report must be signed by Faculty guide, Head of Department and/or External evaluator.

E. Contents of OJT report-

The OJT report must reflect 8 weeks of work and justify the same. The OJT report should be well documented and supported by –

1. Title/Cover page
2. College Certificate
3. Company Certificate
4. Declaration by student
5. Acknowledgment by student
6. Executive Summary/ Abstract
7. Index
8. Cauterization scheme-
 - i. **Introduction** (Need for the Study, Objectives of the Study, Scope, Limitations, Research Questions / Hypotheses (if applicable), etc.)
 - ii. **Review of Literature** (Theoretical Framework, Previous Research Studies, Theoretical Models / Approaches Relevant to the Study)
 - iii. **Research Methodology** (Research process, Research Design, Nature of the Study, Sampling plan, Data types and data collection tools, Data analysis techniques, etc.. *RM may not applicable in case of task work.*)
 - iv. **Company Profile** (Overview of the Company, Vision, Mission, Products / Services / Operations, Organizational Structure, SWOT Analysis, Achievements, Financials, etc.)
 - v. **Industry Profile** (Industry overview, Industry size and structure, Current Market Trends, Growth Drivers and Opportunities, Challenges and issues, Regulatory and Legal Framework, Government initiatives and support, Competitor, etc.) *Industry profile may not require where project is done in Consultancy organizations or Large trading organizations. Guide can decide depending on the company.*
 - vi. **Data Analysis and Interpretation** (Qualitative and /or Quantitative based on survey data, case studies, observation sheets, Interviews, reports, task work, etc. Use of charts, graphs, tables, etc. required)

- vii. **Findings, Suggestions and Conclusion** (Qualitative and /or Quantitative)
9. Learning from the project by the student
10. References (Books/ Journals/ Websites/ Reports)
11. Annexure/ Appendix (if any) like Questionnaire/ Schedules/ Interview transcripts/ Reports/ Observation sheet/ Financial statement/ Any supporting material

F. OJT Evaluation-

Total Assessment	-200 Marks
Formative Assessment	-100 Marks
Summative Assessment	-100 Marks

1] Formative Assessment Weightage (100 marks):

Presentation	- 30 marks
Quality of report	- 20 marks
Internal Viva-voce	- 50 marks

The students shall submit a spiral bound copy of the OJT report after 12 weeks of work. The college shall conduct presentation and an internal viva-voce for evaluation of the OJT. The Panel shall comprise of two evaluators appointed by the Head of Department, one is faculty guide of the student. College is encouraged to involve senior alumni, industry experts, and recruiters to conduct the internal viva-voce. The internal viva-voce panel shall assess the OJT report and suggest changes required, if any. Student is required to do suggested changes, if any, immediately.

2] Summative Assessment Weightage (100 marks):

Presentation	- 30 marks
Viva-voce	- 70 marks

There shall be a panel of 2 evaluators for the External Viva-Voce comprising of one internal faculty of college and one outside evaluator which shall consist of approved faculty of any management college or industry expert or senior alumni.

The Internal and the External viva-voce shall evaluate the candidate based on:

1. Adequacy of work undertaken by the student
2. Application of concepts learned
3. Understanding of the organization and business environment
4. Analytical capabilities
5. Technical Writing and Documentation Skills
6. Outcome of the project – sense of purpose
7. Utility of the project to the organization

Semester: III	R25-MBA-PEC-304	Business Analytics
Credits: 03	Total Marks: 100 (50 FA + 50 SA)	Programme Elective Course

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
304.1	Remembering	Recall the fundamental concepts and terminologies in business analytics
304.2	Understanding	Explain the differences between business analytics and related fields, as well as the ethical considerations and quality of data in business analytics and key applications of business analytics.
304.3	Applying	Utilize basic tools of business analytics, such as data exploration and visualization tools, to perform basic exploratory data analysis and data cleaning tasks.
304.4	Analysing	Break down business problems into key questions and analyze data to derive meaningful insights for decision-making in various business domains like marketing, finance, HR, operations, health care, and agri business
304.5	Evaluating	Assess the effectiveness of different data-driven strategies and analytical techniques in improving business performance across different sectors through case studies
304.6	Creating	Design and propose data-driven solutions and strategies to address complex business challenges, integrating knowledge from marketing, finance, HR, operations, health care, and agri-business analytics.

UNIT1-Business Analytics Basics: Definition of analytics, Evolution of analytics, The Growing Role of Business Analytics, Business analytics vs business analysis, Business intelligence vs Data Science, Data Analyst Vs Business Analyst, Types of Analytics - Descriptive, Diagnostic, Predictive, Prescriptive, Concept of insights. Importance of data in business analytics, Differences between data, information and knowledge, Quality of data, 5Vs of Big Data, Big Data Collection and Ethics, Data sources and collection methods, Data privacy, security, and ethical considerations.(8)

UNIT2-Analytical decision-making: Analytical decision-making process, characteristics of the analytical decision making process. Breaking down a business problem into key questions that can be answered through analytics, Characteristics of good questions, Skills of a good business analyst, The Basic Tools of Business Analytics - Data exploration and visualization (using tools like Excel, Tableau, or Power BI), Concept of Statistical analysis and hypothesis testing (Hypothesis testing numerical / tests not expected) Data Visualization: Concept of Data Visualization, Popular Data Visualization tools, Exploratory Data Analysis(EDA), Data Cleaning, Data Inspection.(8+2)

UNIT3- Business Analytics in Marketing and Finance: Marketing Analytics, Customer segmentation, targeting, and positioning, Campaign management and ROI measurement, Data-driven marketing strategies. Financial Analytics - Risk management and credit scoring, Financial forecasting and planning, Case studies: Financial performance improvement through analytics (Non-Statistical - Conceptual Treatment only). (8)

UNIT4 -Business Analytics in HR and Operations: HR Analytics, Workforce planning and talent management, Employee engagement and performance measurement, Case studies: Enhancing HR practices with analytics. Operations Analytics - Process optimization and efficiency improvement, Supply chain analytics and logistics management, Case studies: Operational excellence through analytics Non-Statistical - Conceptual Treatment (8+2)

UNIT-5 Business Analytics in Health Care and Agri Business: Health Care Analytics - Patient care optimization and resource management, Predictive analytics for health outcomes, Case studies: Improving health care delivery with analytics. Agri Business Management Analytics - Crop yield prediction and supply chain management, Market analysis and risk management in agriculture, Case studies: Enhancing agricultural productivity with analytics Non Statistical - Conceptual Treatment only). (8+1)

Suggested Text Books:

1. Davenport, T. H., & Harris, J. G. (2007). "Competing on analytics: The new science of winning". Harvard Business School Press.
2. Provost, F., & Fawcett, T. (2013). "Data science for business: What you need to know about data mining and data-analytic thinking". O'Reilly Media.
3. Sharda, R., Delen, D., & Turban, E. (2019). "Business intelligence, analytics, and data science:

Suggested Reference Books

1. Business Analytics: Data Analysis & Decision Making ,S. Christian Albright, Wayne L. Winston, Cengage Learning (South-Western College Publishing)
2. Data Science for Business, Foster Provost, Tom Fawcett, O'Reilly Media
3. Competing on Analytics: The New Science of Winning, Thomas H. Davenport, Jeanne G. Harris, Harvard Business Review Press

E-resources-

<https://www.youtube.com/watch?v=OGs2YsqvWDg>
<https://www.odoo.com/r/4cY>

Semester: III	R25-MBA-PEC-305	Digital Business
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Programme Elective Course

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
305.1	Remembering	DESCRIBE the conceptual framework of e commerce, mobile commerce and social commerce.
305.2	Understanding	SUMMARIZE the impact of information, mobile, social, digital, IOT and related technologies on society, markets & commerce.
305.3	Applying	ILLUSTRATE value creation & competitive advantage in a digital Business environment.
305.4	Analysing	EXAMINE the changing role of intermediaries, changing nature of supply chain and payment systems in the online and offline world.
305.5	Evaluating	ELABORATE upon the various types of digital business models and OUTLINE their benefits and limitations.
305.6	Creating	DISCUSS the various applications of Digital Business in the present day world.

Unit I: Foundations of Electronic Commerce and Digital Economy -Electronic Commerce: Concept, evolution, and scope. Digital and social worlds. Digital economy – characteristics and components. Digital enterprise and networked organizations. E-Commerce versus E-Business. Electronic markets and digital networks. Classification of e-commerce based on nature of transactions and relationships among participants (B2B, B2C, C2C, C2B, G2C). E-Commerce business models. Integration of marketplace and marketpace. Drivers, benefits, and limitations of e-commerce. Impact of e-commerce on business organizations, government, customers, citizens, and society. (8)

Unit II: Mobile Commerce, Social Commerce and Internet of Things: Mobile Commerce (M-Commerce): Concept, attributes, applications, and benefits. Mobile marketing – mobile shopping and advertising. Social commerce: Concept and evolution. Social media and social networking platforms. Social media marketing and social commerce business models. Consumer-to-Consumer (C2C) and Person-to-Person (P2P) electronic commerce. Benefits and limitations of social commerce. Internet of Things (IoT): Concept and architecture. Applications of IoT – smart homes, smart cities, smart cars, wearable computing, and smart devices. (8+2)

Unit III: Digital Business Ecosystem and Electronic Markets : Digital business ecosystem. Electronic commerce mechanisms and online purchasing process. E-marketplaces – types, components, and participants. Disintermediation and reintermediation. Customer shopping mechanisms: Webstores, electronic malls, and information portals. Role of intermediaries in electronic marketplaces. Merchant solutions: Electronic catalogs, search engines, and shopping carts. Auctions – traditional auctions versus electronic auctions and dynamic pricing. Digital supply chains: Structure, order fulfillment process, logistics outsourcing, make-to-order (MTO), and mass customization. Digital payments: Smart cards, stored-value cards, micropayments, payment gateways, mobile payments, digital and virtual currencies. Security, legal, ethical, and privacy issues. (8)

Unit IV: Digital Business Applications I – Electronic retailing: B2C e-retailing – characteristics, advantages, and limitations. E-tailing business models. Click-and-brick models. Online versus offline competition. Product and service customization and personalization. Social shopping – concept and benefits. Financial Technology (FinTech): E-banking, mobile banking, digital payments, and virtual banking services. Digital government: E-government models – Government-to-Citizens (G2C), Government-to-Business (G2B), and Government-to-Government (G2G). Introduction to E-learning: Concept, characteristics, advantages, and applications. [8+2]

Unit V: Digital Business Applications II – Online travel and tourism services: Characteristics, benefits, limitations, and competitive environment. E-employment: Online job markets, social recruiting, and electronic recruitment processes. E-health: Concept, electronic medical record (EMR) systems, and digital healthcare services. Digital entertainment and media: Digital products, internet TV, mobile entertainment, streaming music and video services. Introduction to digital gaming and gamification. [8+1]

Suggested Text Books:

1. Introduction to E Commerce & Social Commerce, Turban E , Whiteside J , King D, Outland J Springer
2. E-Business and E-Commerce Management- Strategy, Implementation and Practice, Dave Chaffey, Pearson Education.
3. Electronic Commerce – A Managerial Perspective, Efraim Turban, David King, Dennis Viehland, Jae Lee, Pearson Education.

Suggest Reference Books

1. Turban, E., King, D., Lee, J., Liang, T., & Turban, D., Electronic Commerce: A Managerial and Social Networks Perspective, Springer.
2. Laudon, K. C., & Traver, C. G., E-Commerce: Business, Technology, Society, Pearson Education.
3. Chaffey, D., Digital Business and E-Commerce Management, Pearson.
4. Schneider, G., Electronic Commerce, Cengage Learning.
5. Kalakota, R., & Whinston, A. B., *Electronic Commerce: A Manager's Guide*, Pearson.

E-RESOURCES

1. UNCTAD–E-Commerce and Digital Economy Reports
<https://unctad.org/topic/ecommerce-and-digital-economy>
2. Reserve Bank of India (RBI) – Digital Payments & FinTech Updates
<https://www.rbi.org.in>
3. Government of India – Digital India Initiative <https://www.digitalindia.gov.in>
4. Statista–E-Commerce, Digital Business & Market Trends
<https://www.statista.com>

Semester: III	R25-MBA-PEC-306	International Business Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Programme Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
306.1	Remembering	Explain key concepts, theories, and drivers of international business
306.2	Understanding	Assess India's foreign trade patterns, FTAs, FDI inflows/outflows, and economic institutions
306.3	Applying	Compare and evaluate international market entry strategies for Indian and foreign MNCs.
306.4	Analysing	Analyze foreign exchange markets, BOP, and international financial institutions.
306.5	Evaluating	Interpret and apply export-import procedures, regulatory frameworks, and global logistics.
306.6	Creating	Demonstrate cross-cultural competence and ethical reasoning in global business scenarios.

UNIT 1: Introduction to International Business: Nature, scope, and importance of international business, Domestic vs. international business, Drivers of globalization, Theories of international business- Absolute & Comparative Advantage theory, Heckscher-Ohlin theory, Product Life Cycle theory, Porter's Diamond Model, PESTLE analysis, India's position in the global economy, Challenges & opportunities for Indian businesses in IB, Ethical issues in global business. (8)

UNIT 2: Trade Environment: India's foreign trade policy (FTP) and its evolution, Export Promotion Councils & DGFT roles, India's trade agreements- ASEAN, SAARC, BIMSTEC, India-EU, India-UAE CEPA, potential FTAs (US, UK), WTO & India's stance in multilateral negotiations, FDI & FPI inflows/outflows in India, India's competitive sectors, Case: Any one case of India's latest trade agreement/ disagreement. (8+2)

UNIT 3: Market Entry & Global Strategy: Internationalization process, Entry modes- exporting, licensing, franchising, JV, strategic alliances, wholly owned subsidiaries, MNC, Case- Strategies of any three major Indian MNCs, Global value chain design and supply chain strategies, International marketing & product adaptation decisions. (8)

UNIT 4: International Financial Environment: Foreign exchange markets & exchange rate determination, Spot and forward markets, India's exchange rate policies (RBI perspective), Balance of Payments (BOP)- structure and implications, International financial institutions- IMF, World Bank, ADB, Global financial risks & hedging instruments- forwards, futures, options, India's foreign exchange reserves & external debt scenario (8+2)

UNIT 5: EXIM & Global Logistics: Current Export-Import (EXIM) policy framework in India, Export documentation & procedures, INCOTERMS 2020, Shipping, insurance, customs clearance, Role of EXIM Bank, ECGC, SEZs, EOUs, Payment methods- advance, LC, documentary collections, International logistics, multimodal transportation, Challenges for Indian exporters & logistics competitiveness (8+1)

Reading books and material-

- 1.Charles W. Hill, International Business: Competing in the Global Marketplace, McGraw Hill publications
- 2.Sullivan & Radebaugh, Globalization and Business, PHI Learning.
- 3.Francis Cherunilam, International Business, 7th edition, PHI Learning.
- 4.P. Subba Rao, International Business, 5th edition, Himalaya Publishing House.
- 5.Govt. of India - Foreign Trade Policy (latest edition)
- 6.RBI - Handbook of Statistics on Indian Economy

Additional Reference Material-

- 1.WTO Reports
- 2.UNCTAD World Investment Report
- 3.Economic Survey of India
- 4.NITI Aayog Global Trade Reports
- 5.EXIM Bank Publications
- 6.DGFT website and Notifications

Marketing Management Specialization (Semester-III)

Semester: III	R25-MBA-SCC-307MKT	Services Marketing
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Core Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
307MKT.1	Remembering	Recall the key concepts in services marketing
307MKT.2	Understanding	Describe the role of extended marketing mix in services in managing consumer behavior and in improving service quality.
307MKT.3	Applying	Identify concepts related to service experience in the context of real world offering.
307MKT.4	Analysing	Examine the elements of services marketing and service quality in contemporary context.
307MKT.5	Evaluating	Evaluate segmentation, targeting & positioning of services and assess its importance and challenges in the dynamic marketing environment.
307MKT.6	Creating	Develop marketing mix, service blueprint and servicescapes for various services offering.

Unit 1- Introduction to Services Marketing: Services Marketing: Frontiers of change, service concepts, characteristics and classification of services, services marketing mix - 7 Ps, service marketing triangle, Service sector growth in global and Indian context, challenges faced by the services sector, impact of technology on service firms, evolution of services as value contributors, ethical practices in the service sector. (6)

Unit 2- 3 P's of Services: Process - Service system, importance of process, service development, service blueprint, mapping the process horizontally and vertically, bottlenecks, delays and process failures, standardization vs. customization, value addition in process. **People** – importance and dimension of people in services marketing, service encounters, role of frontline service employees, managing employee behavior and enhancing customer participation, high-contact & low-contact services, emotions in service situations, service profit chain. **Physical evidence** - Servicescape, designing effective servicescapes, impact on customer perception and branding, visual merchandising for services, managing the physical evidence in service marketing. (10+2)

Unit 3- Consumer Behavior & Service Quality: Consumer and organizational behavior in services, service standards - factors and types, TOFU, MOFU, BOFU (Top of Funnel, Middle of Funnel, Bottom of Funnel) - customer buying journey, service quality - levels and dimensions, service quality models - ServQual model, GAP model, Servuction model and Critical Incident model, Relationship between service quality, productivity and profitability, Managing demand and capacity - capacity constraints, understanding demand patterns,

strategies for matching and adjusting capacity and demand, Service recovery and complaint handling, service recovery process, impact of service failures, customer churn. (9)

Unit 4- STP and CRM in services: Meaning and importance, Service segmentation - bases for segmentation, AI and big data-driven segmentation. Service targeting - selecting target market and approaches, precision targeting, omni-channel targeting, dynamic targeting, ethical targeting. Service positioning - techniques of positioning, emotional and value-based positioning, digital presence and brand voice, Challenges for STP, CRM in services marketing, managing customer expectations and complaints for effective CRM, customer retention and customer lifetime value. (7+2)

Unit 5- Service sectors and trends: Overview of service marketing in organized retail, healthcare, hospitality, tourism, airlines, banking & financial services (BFSI), telecom, IT & ITES, logistics, education, event management, Utilization of e-services in various sectors, Emerging trends in services marketing - innovations in service delivery and technology, automation, self-service, augmented reality and virtual reality in services, servitization and product-service systems, future prospects and challenges in services marketing (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. John E.G. Bateson, K. Douglas Hoffman: Services Marketing, Cengage Learning, 4e, 2015
2. Gilmore, Audrey. Services Marketing Management, SAGE Publications, Ltd, 2003
3. Services Marketing – Valarie A. Zeithaml, Mary Jo Bitner, Dwayne D. Gremler, Ajay Pandit, McGraw Hill
4. Service Marketing: Concepts Applications & Cases by M.K. Rampal, S. Gupta, Galgotia Publishing Company
5. Services Marketing: People, Technology, Strategy by Jochen Wirtz, Christopher Lovelock, Jayanta Chatterjee, Pearson Education, 8th Edition

Suggested Reference Books:

1. Services Marketing: Concepts and Practices by Ramneek Kapoor, Justin Paul & Biplab Halder, McGraw Hill
2. Services Marketing by Rajendra Nargundkar, McGraw-Hill, 3rd Edition
3. Services Marketing, 2nd Edition by Rao, Pearson
4. Service Marketing by C. Bhattacharya, Excel Books

Suggested e-resources:

1. <https://www.youtube.com/watch?v=5MBEHY7Q0Ls>
2. <https://www.youtube.com/watch?v=1zYsQSJvbog>
3. <https://www.youtube.com/watch?v=MnsVEKEqVoM>

Semester: III	R25-MBA-SEC-308MKT	Consumer Behaviour
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
308MKT.1	Remembering	Recall the fundamental concepts and scope of consumer & organizational behavior.
308MKT.2	Understanding	Demonstrate a clear understanding of different factors influencing consumer & industrial decision-making.
308MKT.3	Applying	Apply consumer decision-making models to real-world scenarios.
308MKT.4	Analysing	Analyse the influence of different factors on the consumer / industrial decision-making process.
308MKT.5	Evaluating	Evaluate the evolution of the consumer decision-making process in various contexts
308MKT.6	Creating	Design consumer-centric marketing strategies by synthesizing behavioral insights across various customer segments and market environments

Unit 1- Introduction to Consumer Behaviour: Definition of consumer behaviour, consumers vs. customers, buyers vs. users, organizations as buyers, prosumers, Consumer Research Process, role of market segmentation in understanding consumer behaviour, changing patterns of consumer behaviour in the evolving Indian economy, rise of the middle class and aspirational spending, influence of the internet, e-commerce and information technology on the consumer marketplace, new trends in consumer behaviour including AI, augmented and virtual reality, hyper-personalization in consumer experience and its application in marketing. (8)

Unit 2- Determinants of Consumer Behaviour: Personality and self-concept, personality and the role of emotions in consumer decision-making, consumer perception through exposure to stimuli, distortion factors, price perception, perceived quality and risk perceptions, consumer learning including classical conditioning, behavioural and cognitive theories, components of learning, types of consumer behaviour and cognitive response models, consumer attitudes and their functions, attitude models, the relationship between beliefs, feelings and behaviour, Learning and changing attitudes, attitude change strategies, Consumer motivation- needs and goals, motivational conflicts, defense mechanisms, motive arousal, overview of Maslow's hierarchy of needs. (8+2)

Unit 3- Influences on Consumer Behaviour: Cultural influences on consumer behaviour, values and subcultures, impact of Indian cultural diversity on consumer choices, cross-cultural influences, rise of conscious consumerism, social class and money as status symbols,

Activities, Interests, and Opinions (AIO) classification, Values, Attitudes, and Lifestyles (VALS) typology, reference groups and their types, group norms, family lifecycle stages, family purchase roles, word-of-mouth communication, opinion leadership, mobile-first and app-based shopping behaviour, characteristics of Indian consumers including BoP, Gen Z and HNI consumers, diffusion of innovation including types, process and influencing factors, the adoption process. (8)

Unit 4- Consumer Decision-Making Process: Transformation of decision-making due to the internet, smartphones and digital platforms, types of involvement and decision-making, Consumer Decision-Making Process, types of problem recognition and their implications, information search types and sources, experience and credence qualities, situational variables, shopping motivations, in-store and non-store purchasing processes, post-purchase evaluation including satisfaction, delight, dissatisfaction and complaint behaviour, postpurchase dissonance, Online Consumer Decision Journey, Customer Experience and Touchpoints (8+2)

Unit 5- Industrial Buying Behaviour: Characteristics of industrial buyers, purchase and demand patterns, behavioural economics in B2B contexts, involvement in decision-making, organizational buying roles, decision-making process in organizational settings, factors influencing business buying, ethical concerns in procurement and supply chain management. (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. Schiffman, L.G., Kanuk, L.L., & Kumar, S.R. (10th Edition). Consumer Behaviour, Pearson Education.
2. Hawkins, D., & Mothersbaugh, D. (13th Edition). Consumer Behaviour, McGraw Hill.
3. Suja R. Nair. Consumer Behaviour: In Indian Perspective, Himalaya Publishing House.
4. Martin Lindstrom. Buyology: Truth and Lies About Why We Buy, Doubleday.
5. Paco Underhill. Why We Buy: The Science of Shopping, Simon & Schuster.

Suggested Reference Books:

1. Rama Bijapurkar. We Are Like That Only, Penguin India.
2. Business World. The Marketing Whitebook.
3. Articles from Economic Times, Mint, Business Standard (Brand Equity, Brand Wagon).

Suggested e-resources:

1. Open access reputed journals on Consumer Behaviour
2. https://onlinecourses.swayam2.ac.in/e-learning/preview/imb24_mg124 Online course on Consumer Behaviour
3. https://onlinecourses.swayam2.ac.in/e-learning/preview/imb26_mg105 Online course on Consumer Behaviour

Semester -III	R25-MBA-SEC-309MKT	Industrial Marketing
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
309MKT.1	Remembering	DEFINE the terms and concepts related to Business to Business
309MKT.2	Understanding	EXPLAIN How these terms and concepts apply in real-world B2B contexts, including the roles of relationships, long buying cycles, and organizational decision-making.
309MKT.3	Applying	APPLY principles of segmentation, targeting, and positioning (STP) to B2B markets
309MKT.4	Analysing	FORMULATE an effective B2B marketing mix (product, price, place, promotion) tailored to institutional or industrial customers.
309MKT.5	Evaluating	EVALUATE strategic decisions in Business-to-Business (B2B) marketing by critically assessing market segmentation, targeting, positioning, and the effectiveness of marketing mix elements
309MKT.6	Creating	DESIGN Marketing Mix Strategy tailored for different a B to B segment that integrates digital tools, sales force alignment, and customer value propositions.

UNIT 1. Overview of Business-to-Business Marketing:

Concept of the Business-to-Business (B2B) Marketing, Characteristics of Business Marketing, Classifying goods for the business market, Commercial and institutional customers, B2B vs B2C Marketing, Buying Situations, Role of Buying Centre, Organizational Buying and Buyer Behavior: Organizational buyers' decision process - A Stepwise Model and A Process Flow Model, B2B Marketing Strategy: strategy Formulation and Management Process, Managing Products and Services in Business Markets. (8)

UNIT 2. Segmentation, Targeting & Positioning for B2B Markets:

Concept of Market Segmentation, basic framework of segmentation, Bases of business-to-business segmentation, Macro Variables – Industry Characteristics, Company Size, Customer Location, End User Markets, product Applications. Micro Variables: Customer Interaction needs, Organizational Capabilities, Purchasing Criteria. Target Markets: Concentrated Marketing, Differentiated Marketing, Undifferentiated Marketing. Criteria used for choosing a target market. Positioning, Issues in Segmentation, Targeting and Positioning. (8+2)

UNIT 3. Product and Pricing Strategy for B2B Markets:

Product management: in industrial market, role of product in the industrial market, new product development, industrial product life cycle, product evaluation matrix, techniques for identifying new products, Importance, Use of Innovation, Competitiveness & Technology. Pricing: Pricing strategies; Cost Based, Value based, Competitive. Pricing policy, competitive bidding, commercial terms and conditions. (8)

UNIT 4. Business Marketing Communication and Relationship Management

The Role of Business Marketing Communication, Industrial Advertising, Sales Promotion, Public Relations (PR), Trade Shows and Exhibitions, Personal Selling: Role & Characteristics of Personal Selling, Development & Management of Sales Force, Key Account Management -ABC Analysis of Industrial Customers. Buyer seller relationship, role of service in industrial markets. CRM. (8+2)

UNIT 5. Distribution Channels:

Distinctive Nature of B-to-B Distribution Channels, Types of Industrial Middlemen, Channel Flow Design, Formulating Distribution Strategies and Cost Benefit Analysis, Value chain analytics for supply chain integration. Current Trends for B2B Markets: Use of social media for Lead generation and branding, Adoption of Technology (CRM, ERP, E-Commerce Platform), Role of AI in B2B Distribution, Virtual Marts. (8+1)

Suggested Text Books:

1. Industrial Marketing: Text and Cases Krishna K. Havaladar Tata McGraw-Hill Education
2. Industrial Marketing By Hill, Alexander and cross, Irwin
3. Industrial Marketing by Mukherjee, Excel Book

Suggested Reference Books:

1. Handbook of Business-to-Business Marketing Gary L. Lilien, J. Andrew Petersen, and Stefan Wuyts, Edward Algar Publication (2022) (2nd Edition)
2. Zimmerman, A. and Blythe, J. (2017), 'Business to Business Marketing Management', 3rd edition, Routledge.
3. Business Marketing, Concepts and Cases, Sharad Sarin, McGraw Hill, 2013

E-Resources:

1. Business to Business Marketing on Swayam Platform
2. International B2B (Business-to-Business) Marketing on Coursera

Semester: III	R25-MBA-SEC-310MKT	Product and Brand Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
310MKT.1	Remembering	Recall foundational concepts of product and brand management.
310MKT.2	Understanding	Explain key frameworks in branding, customer-based brand equity, and innovation management.
310MKT.3	Applying	Apply practical approaches to develop, test, and position products and brands
310MKT.4	Analysing	Analyze market data, perceptual maps, brand audits, and product portfolios
310MKT.5	Evaluating	Critically evaluate brand performance, product success, and campaign effectiveness
310MKT.6	Creating	Design impactful branding and product strategies

Unit 1- Product and Branding Decisions: Product policy and objectives, product mix and product line decisions, Managing Products across PLC stages, packaging strategies, the concept of branding and brand management, difference between products and brands, brand positioning and repositioning strategies, brand equity and loyalty, contemporary brand management practices in Indian FMCG, D2C and luxury markets. (7)

Unit 2- Product Strategy and Planning: Product vision, mission, and roadmap, Strategies for product growth- intensive, interactive, and diversification, portfolio analysis using BCG matrix, GE model, Shell model, Ad Little matrix, and risk-return analysis, Product modification and repositioning, Managing product cannibalization, Sustainable and green product strategies, Product audits and reviews (7+2)

Unit 3- Product Development: NPD process, Idea generation and screening techniques, the role of R&D and cross-functional collaboration, product maps and joint space maps, perceptual mapping, preference segmentation and market structure, BRANDAID and Defender models, behavioral learning curves, innovation diffusion and adoption models, product pre-testing and test marketing, time to market, Ethical and regulatory issues in product management (9)

Unit 4- Understanding and Building Brand: Essentials and benefits of branding, attributes of successful brands, significance to consumers and firms, selecting brand names and creating awareness, types of brand associations and images, brand identity and personality, sources of brand equity, customer-based brand equity, brand audit and tracking systems, brand value chain, managing brand equity using Aaker, Keller, and Brand Asset Valuator models, licensing, franchising, and global branding strategies. (9+2)

Unit 5- Strategic Brand Management: Brand building and positioning strategies, designing brand marketing programs, evaluating brand performance using KPIs, Brand Extension, branding in retail and digital-first businesses, role of private labels and co-branded ventures, emerging trends in brand management such as sustainability, purpose-driven brands, AI in branding, brand extensions and rebranding, managing brand reputation in the digital age, Ethical and social issues in branding, Indian and Global Brand Case Studies (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. A. K. Chitale, Ravi Gupta, "Product Policy and Brand Management, Text and Cases", Second edition, PHI Learning Private Limited, 2013
2. Kevin Lane Keller, M. G. Parameswaran, Isaac Jacob, "Strategic Brand Management", Third edition, 2011, Pearson
3. Marc. A. Annacchino, P.E. "New Product Development, From Initial idea to product management", 2003, Elsevier
4. U. C. Mathur, Product and Brand Management, First Edition, 2007, Excel Books

Suggested Reference Books:

1. Principles of Marketing, Philip Kotler, Gary Armstrong, Prafulla Agnihotri, EhasanHaque, Pearson
2. Marketing Management- Text and Cases, Tapan K Panda, Excel Books
3. S Ramesh Kumar: Marketing and branding. Pearson publishers "Indian Marketing: Cases and Concepts" by S. Neelamegham
4. Kevin Lane Killer, Strategic Brand Management, Pearson, New Delhi.

Suggested e-resources:

1. <https://youtu.be/0dX0g5XFm8g> (all related videos of instructor Prof. Vinay Sharma on IIT Roorkee channel)
2. <https://www.sciencedirect.com/org/journal/journal-of-product-and-brand-management> (Journal of Product & Brand Management)

Semester: III	R25-MBA-SEC-311MKT	Customer Relationship Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
311MKT.1	Remembering	Define concepts and components of CRM, customer acquisition & retention and CRM mechanics
311MKT.2	Understanding	Explain key concepts and theories associated with CRM.
311MKT.3	Applying	Apply principles, theories and models of CRM in B2B and B2C markets
311MKT.4	Analysing	Classify Customer acquisition and retention strategies and analyze Customer database in CRM.
311MKT.5	Evaluating	Evaluate suitability and effectiveness of CRM strategies in marketing situations of products across various industries.
311MKT.6	Creating	Develop CRM strategies for various markets

Unit 1- Introduction of CRM: Concept of Relationship Management, Internal and External relationship management, Need and Importance of relation with customers and other stakeholders, Approach towards Marketing: A Paradigm Shift- Transition from Product focus to Customer focus, Transactional vs Relationship Marketing, Linkage between customer satisfaction- Customer Loyalty and business performance, Relationship Management Theories, Building Brands through Relationship Marketing, Service Level Agreements, Levels of CRM, CRM as a strategic marketing tool, CRM significance to the stakeholders, Strategic CRM, Operational CRM, Analytical CRM, Collaborative CRM, CRM Value Chain Model, Customer lifecycle stages, IDIC Model. (9)

Unit 2- Customer Acquisition, Retention and Loyalty Management: Acquisition of new customer, understanding customer value, sources of customer value, Values from products, services, people, physical evidence, customer communication, Channels etc., customer value estimates, KPI of a customer acquisition program, Customer Touch Points, Digital acquisition strategies. Concept of Customer retention, Role of CRM in Customer in retention, Economics of customer retention, Strategies of customer retention, Complaint management system, KPI of customer retention program, terminating customer relationship. Concept and Significance of Customer Loyalty, Customer Life Cycle and Customer Life Time Value (CLTV), Customer Loyalty Ladder, Emotional vs Behavioral loyalty, Impact Of Customer Defections, Types of Defectors, Strategies to reduce customer defections, CRM Framework-Switching. (9+2)

Unit 3- CRM Mechanics: Maintaining customer database, Desirable database attributes, Data warehousing, Data integration, Data mining and Privacy issues, Customer Portfolio

Management (CPM) -Concept and basic disciplines, Market segmentation-sales forecasting and CPM, CPM in B2B, Recency, Frequency and Monetary Value (RFM) Analysis, core customers management strategies, CRM and Customer Experience Management, Concept of Customer experience, experiential marketing strategies and Tactics, Customer experience and Role of CRM (7)

Unit 4- CRM in B2C and B2B Market: Service business characteristics and classification, Service recovery, Tools Used in B2C CRM, CRM in Banking Industry, Hospitality Industry, Aviation Industry, Retail industry, Importance of CRM in B2B markets, Tools Used in B2B CRM, Key Metrics in B2B CRM, Internal CRM and Employee relationship management, Differences Between B2C and B2B CRM (6+2)

Unit 5- CRM Implementation, Performance & Contemporary Issues: CRM Implementation Process, Evaluation of CRM process, Challenges in CRM implementation, Customer Care Management through Information Technology Tools- Electronic Point of Sales (ePOS), Emerging trends in CRM, Social CRM, Challenges involved in formulating and implementing e-CRM strategies, Multichannel CRM, Role of Social media in CRM, Six E's of e-CRM,, Mobile CRM, Artificial Intelligence (AI) with CRM System, Legal, Ethical & Privacy Issues in CRM (9+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. Customer Relationship Management – Concepts and Technologies by Francis Buttle, 2nd Edition, Butterworth
2. Relationship Management – Text and Cases, S. Shajahan, TMGH.
3. J N Sheth, AtulParvatiyar, G. Shainesh, 2001, Customer Relationship Management, Tata McGraw Hill
4. Customer Relationship Management: Concepts and Cases, Second Edition, Alok Kumar Rai PHI learning Pvt Ltd, New Delhi

Suggested Reference Books:

1. Handbook of Relationship Marketing by JagdishSheth and AtulParvatiyar, Response Books, Sage Publications.
2. Zikmund, McLEOD, Gilbert, Customer Relationship Management
3. Customer Relationship Management- Concepts and Technology, Second Edition, Francis Buttle, Elsevier, Sabre foundation
4. Brown, Stanley A 2001, Customer Relationship Management, John Wiley& Sons
5. Anderson, Kristin , 2002, Customer Relationship Management, Tata McGraw-Hill

Suggested e-resources:

1. <https://www.salesforce.com/crm/what-is-crm/>
2. https://onlinecourses.swayam2.ac.in/e-learning/preview/imb26_mg129 NPTEL course on CRM

Financial Management Specialization (Semester-III)

Semester: III	R25-MBA-SCC-307FIN	Advanced Financial Management
Credits: 03	Total Marks: 100 (50 FA + 50 SA)	Subject type: Special Core Course

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
307FIN.1	Remembering	DESCRIBE the basic concepts in financing, investing and profit distribution in a firm
307FIN.2	Understanding	EXPLAIN theoretical concepts related to raising and use of funds and value of firm
307FIN.3	Applying	CALCULATE values for making capital structure, investment, liquidity and dividend decisions in the financial management of a firm
307FIN.4	Analysing	ANALYZE the Leverage and EBIT EPS Analysis associate with Financial Data in the corporate
307FIN.5	Evaluating	EVALUATE projects under capital rationing, risk & uncertainty for optimal investment decision
307FIN.6	Creating	DESIGN an appropriate financial strategy using any one or multiple concepts/ techniques learned in this course.

Unit 1- Corporate Restructuring & Corporate valuation: Concept, need and forms of corporate restructuring, Financial distress, turnaround strategies and corporate reorganization, Analysis of financial statements: Cash Flow and Funds Flow Statements, Value-Based Management (VBM): Concept and significance, Economic Value Added (EVA): Meaning, components, advantages & limitations, Market Value Added (MVA): Concept and comparison with EVA, Free Cash Flow (FCF) and Firm Valuation **(8)**

Unit 2- Capital Structure and Firm Value: Assumptions and definitions of capital structure, Net Income, Net Operating Income and Traditional approaches, Modigliani and Miller theory (with and without taxes), Cost of Capital: Concept, significance and calculation of WACC, Trade-off theory, pecking order theory and signaling theory, EBIT–EPS analysis and ROI–ROE analysis, operating, financial and combined leverage, Guidelines for capital structure planning. **(8+2)**

Unit 3- Capital Budgeting: Comparison of NPV, IRR, PI and Discounted Payback Period, Mutually exclusive and replacement investment decisions, Risk and uncertainty in capital budgeting: sources and measurement, Capital rationing: hard and soft rationing, project selection, Certainty equivalent approach, Sensitivity analysis and scenario analysis, Decision tree analysis, Inflation, real v/s nominal discount rate, Qualitative factors in project evaluation **(8)**

Unit 4- Working Capital Management: Determinants and policies of working capital management, Financing of working capital by banks and NBFCs, Cash and liquidity management, Motives for holding cash, Cash management models, Operating cycle approach, Management of surplus funds and short-term investments, Credit management: objectives and credit policy variables, Control and collection of receivables, Factoring, forfaiting and securitization of receivables, (No problems on estimation of working capital) **(8+2)**

Unit 5- Dividend Policy and Firm Value: Dividend policy: concept and relevance, Factors influencing dividend decisions, Legal and procedural aspects of dividend payment, Bonus shares, stock splits and rights issue, Share buyback: objectives, SEBI guidelines and valuation impact, Dividend policies in practice (Indian corporate perspective), Dividend valuation models: Walter's Model, Gordon's Model, Modigliani and Miller Hypothesis, Relationship between investment, financing and dividend decisions. **(8+1)**

Note:—

1. Question paper weightage:
Numerical Problems: 60%, Theory: 40%
2. Numerical problems should be taught on:
 - Funds Flow Statement and Cash Flow Statement
 - Calculation of EVA, MVA and Free Cash Flow
 - Firm valuation using capital structure theories
 - EBIT–EPS and leverage analysis
 - Capital budgeting under risk: sensitivity, scenario and decision tree
 - Capital rationing and project selection
 - Optimum cash balance using operating cycle and inventory models
 - Receivables management:
 - Collection period
 - Bad debt estimation (percent of sales & receivables methods)
 - Dividend valuation models (Walter, Gordon, M&M)

Suggested Books:

1. Financial Management: Text and Problems by M Y Khan & P K Jain, Publisher: TMH, New Delhi.
2. Financial Management Theory & Practice by Prasanna Chandra, Publisher: TMH, New Delhi.
3. Financial Management by I M Pandey, Publisher: Vikas Publishing House, New Delhi.
4. Advanced Financial Management by Dr. Mahesh Abale & Dr. Shriprakash Soni, Himalaya Publication House
5. Financial Management by Ravi Kishore, Publisher: Taxman's publishing House, New Delhi.
6. Financial Management by C. Paramasivan, T. Subramanian, New Age
7. Financial Management by Dr. Anil Kumar Dhagat- Wiley India

Suggested Reading:

1. Financial Management: Theory & Practice by Eugene F. Brigham, Michael C. Ehrhardt
2. Fundamentals of Financial Management by Van Horne, Publisher: Prentice Hall of India.

Suggested E-Resources:

1. <https://nptel.ac.in>
2. <https://hbr.org>
3. <https://www.icai.org>
4. <https://www.youtube.com/@nptelhrd>
5. <https://www.youtube.com/@FinanceTube>

Semester: III	R25-MBA-SEC-308FIN	Financial Markets and Banking Operations
Credits: 03	Total Marks: 100 (50 FA + 50 SA)	Subject type: Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
308FIN.1	Remembering	DESCRIBE the structure, participants and instruments of financial markets and banking system.
308FIN.2	Understanding	EXPLAIN the functioning of money market, capital market and banking operations.
308FIN.3	Applying	APPLY concepts of banking products, services and financial instruments in practical situations.
308FIN.4	Analysing	ANALYZE interest rate movements, risk management practices and regulatory framework of banks and markets.
308FIN.5	Evaluating	EVALUATE the role of financial institutions and markets in economic development.
308FIN.6	Creating	DESIGN suitable financial and banking solutions based on market conditions and customer requirements.

Unit 1 – Introduction to Financial System and Financial Markets: Meaning and structure of financial system; Components of financial system; Role of financial system in economic development; Overview of Indian financial system. Financial Markets – Meaning, classification and functions; Money market and capital market – characteristics and differences; Participants in financial markets; Financial instruments – short-term and long-term instruments. Recent developments in Indian financial markets. (8)

Unit 2 – Money Market and Capital Market Operations: Money Market – Meaning, features and importance; Instruments of money market: Treasury Bills, Commercial Papers, Certificates of Deposit, Call and Notice Money Market, Repo and Reverse Repo. Capital Market – Primary market and secondary market; Issue of securities; Book building process; Role of SEBI; Stock exchanges in India – BSE and NSE; Trading mechanism and settlement system. (8+2)

Unit 3 – Banking System and Banking Operations: Indian Banking System – Structure and evolution; Types of banks: Commercial banks, Cooperative banks, Regional Rural Banks, Development banks. Banking operations – Deposit accounts, lending operations, credit creation process; Interest rate determination; Priority sector lending; Non-Performing Assets (NPAs) – concept and management. (8)

Unit 4 – Risk Management and Regulation of Banks: Types of risks in banking – Credit risk, market risk, liquidity risk, operational risk. Asset Liability Management (ALM); Capital adequacy norms; Basel I, II and III framework; Role of RBI in banking regulation and

supervision; Monetary policy tools. Digital banking and technological innovations in banking operations. **(8+2)**

Unit 5 – Financial Institutions, Financial Inclusion and Emerging Trends: Non-Banking Financial Companies (NBFCs) – Role and regulation; Mutual funds, insurance companies and pension funds; Development financial institutions. Financial inclusion – Meaning, objectives and initiatives; Payment systems and instruments – UPI, NEFT, RTGS, IMPS; FinTech and its impact on financial markets and banking; Challenges and future trends. **(8+1)**

Suggested Books:

1. Financial Markets and Institutions – L.M. Bhole & J. Mahakud, Tata McGraw-Hill.
2. Indian Financial System – Bharati V. Pathak, Pearson Education.
3. Banking Theory and Practice – K.C. Shekhar & Lekshmy Shekhar, Vikas Publishing House.
4. Financial Institutions and Markets – Frederic S. Mishkin & Stanley Eakins, Pearson.

Suggested Reading:

1. The Indian Financial System – Vasant Desai, Himalaya Publishing House.
2. Commercial Banking – Reed, Cotter, Gill & Smith, Cengage Learning.

Suggested E-Resources:

1. <https://nptel.ac.in> (Courses on Financial Markets and Banking)
2. <https://www.rbi.org.in> (Banking regulation, monetary policy, reports)
3. <https://www.sebi.gov.in> (Capital market and investor protection)
4. <https://www.bseindia.com> / <https://www.nseindia.com>
5. <https://www.investopedia.com> (Financial markets and banking concepts)

Semester: III	R25-MBA-SEC-309FIN	Personal Financial Planning
Credits: 03	Total Marks: 100 (50 FA + 50 SA)	Subject type: Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
309FIN.1	Remembering	Understand the need and aspects of personal financial planning.
309FIN.2	Understanding	Describe the investment options available to an individual
309FIN.3	Applying	Identify types of risk and means of managing it
309FIN.4	Analysing	Determine the ways of personal tax planning
309FIN.5	Evaluating	Explain retirement and estate planning for an individual
309FIN.6	Creating	Create a financial plan for a variety of individuals.

Unit 1. Introduction to Financial Planning: Need for Financial Planning, Assessing personal and financial goals, needs and priorities, attitudes and expectations and risk tolerance level, Personal Financial Planning Process, Preparation of Personal Budget, Personal Financial Statements, Responsibilities of a Financial Planner, Time Value of Money, KYC, PAN & AADHAR. **(4)**

Unit 2. Investment Planning: Introduction to Investment Planning, Investment Criteria-liquidity, safety and Profitability, Investment vehicles (Gold, Bonds, Equity, FD, Insurance, MFs, ETFs, Post Office Savings, Real Estate etc.), Risk and Return associated with these investments, Return comparison over a period of time from different asset classes, Investment strategies, Mutual Funds as Investment Vehicle-Special focus on SIP, STP, and SWP, NFOs, Trading in Commodities, Derivatives and F&Os, Crypto currency, Creating an Investment Portfolio, Awareness of mis-selling in investment products. **(9+2)**

Unit 3. Risk Analysis, Insurance Planning and Debt: Risk analysis, Concept of long-term risk, Insurance decisions in personal financial planning, Types of insurance cover- mortality, health, disability, property and liability, ULIPs and Term Plans, Credit Card Financing, Types of Consumer and Home Loans- cost and risk, Credit Score. **(9)**

Unit 4. Tax Planning: What is Tax Deduction? Tax Deductions under the Section and respective Subsections of : 80C, 80D, 80E, 80G, 80 I, Sections 80 JJA, 80QQB, 80RRB, 80TTA, 80U and other relevant sections, Direct Tax Code (DTC), Taxation impact on different investment options, Personal tax planning under New v/s Old regime, Filing IT Returns. **(9+2)**

Unit 5. Retirement Planning and Estate Planning: Wealth creation, retirement planning for an individual, Pension Plans, Provident Fund, Gratuity, Life Insurance Plans., General

Insurance Plans, Reverse Mortgage Plans, Senior Citizen Schemes, What is Estate? Who needs Estate Planning? Transferring assets during life time, Power of Attorney, transferring assets post death – e.g., Nominations, Will, and Creating Trusts. **(9+1)**

Notes:

1. The weightage in the question paper shall be as follows: Numerical problems / Cases: 40% & Theory: 60%
2. Formats of documents to transfer assets should be discussed
3. Numerical problems on the following should be taught;
 - a) Time Value of Money: Compounding, Discounting, Annuities, Sinking Fund, Perpetuities
 - b) EMI calculation on loans

Suggested Books:

1. Basics of Personal Financial Planning Insurance Education Series by NIA, K C Mishra, Steward Doss, Cengage Delmar Learning India Pvt. Ltd.

Suggested Reference Books:

1. Introduction to Financial Planning, Indian Institute of Banking & Finance
2. Personal Financial Planning Theory and Practice, Kaplan Schweser
3. Personal Finance, E. Thomas Gorman and Raymond E. Forgue, Southwest-Western Cengage Learning.
4. Fundamentals of Financial Planning, Michael Dalton, Joesph Gillice, James Dalton and Thomas
5. Langdon, Money Education
6. Personal Financial Planning, Benedict Koh Wai Mun Fong, Pearson
7. Personal Financial Planning, Lawrence J. Gitman, Michael D. Joehnk, Cengage NOW.

Suggested References:

1. <https://nptel.ac.in> (Personal finance, TVM, investment planning)
2. <https://www.incometax.gov.in> (Tax planning, deductions, return filing)
3. <https://www.sebi.gov.in> / <https://investor.sebi.gov.in> (Investor awareness, mutual funds)
4. <https://www.amfiindia.com> (Mutual fund education, SIP calculators)
5. <https://www.rbi.org.in> (Loans, EMI concepts, financial literacy)
6. <https://www.irdai.gov.in> (Insurance planning and policyholder education)
7. <https://www.pfrda.org.in> (Retirement planning and pension schemes)
8. <https://www.investopedia.com> (Personal finance concepts and tools)

Semester: III	R25-MBA-SEC-310FIN	Digital Banking
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Subject type: Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
310FIN-1	Remembering	REMEMBER various concepts and products in Digital Banking
310FIN-2	Understanding	EXPLAIN and understand the significance and development of Digital Banking
310FIN-3	Applying	COMPARE and contrast the Branchless Banking and Traditional Banking
310FIN-4	Analysing	ANALYZE the payment system of digital banking from consumer's point of view.
310FIN-5	Evaluating	EVALUATE the Role of digital banking and emerging technologies in economic development.
310FIN-6	Creating	CREATE a holistic digital transformation strategy for a bank.

Unit 1- Introduction to Digital Banking: Concept, Advantages, Products, significance, development of digital Banking, Distinct Functionaries/Dimensions of a Digital Bank, Customer Education for Digital Banking, Role of digital banking in economic development, Financial Inclusion. (8)

Unit 2-Digital Banking Products: ATMs, Instant Money Transfer Systems, Proprietary, Brown Label and White Label ATMs, ATM Network Planning – Onsite / Offsite, Security and Surveillance of ATM Sites, Cash Deposit Machines : Overview, Features, CDM Network Planning – Onsite / Offsite and Profitability of CDMs, Mobile Banking: Overview and Brief History, Product Features and Diversity, IMPS, Profitability of Mobile Banking, RiskManagement and Frauds, Internet Banking : Product Features Corporate and Individual Internet Banking, Integration with e-Commerce Merchant sites, Back End Operations and Technology.(8+2)

Unit 3- Branchless Banking: Objectives, Introduction, Financial Inclusion – Logic and logistics, Vehicles for Financial Inclusion, Business Correspondents / Business facilitators, Digital Banking Products for Financial Inclusion, Payment Banks, Fintech Companies.(8)

Unit 4- Payment System: Overview of global and domestic payment systems, Immediate Payment Service (IMPS), National Unified USSD Platform (NUUP) and UPI, Participants in UPI, Benefits to Participants, National Automated Clearing House (NACH) Aadhaar Enabled Payment System (AEPS) , e-KYC , Cheque truncation System (CTS) , National Financial Switch (NFS) , ATM, RTGS , NEFT, ECS, MICR.(8+2)

Unit 5- Innovation and Banking: Innovative Technologies in Banking: Artificial Intelligence, Machine Learning, Big Data, Block Chain, Forex Settlement. (8+1)

Suggested Text Books:

1. Digital Banking – Indian Institute of Banking and Finance
2. The Digital Banking Revolution – Lugi Wewege
3. Digital Bank : Strategies to Launch or become a Digital Bank – Chris Skinner

Suggested Reference Books.

1. Digital Finance: Platforms, Markets and Regulation – David L. Rogers
2. Payments Systems in India: Vision 2025 – Reserve Bank of India
3. Bank Management & Financial Services – Peter S. Rose & Sylvia C. Hudgins
4. Electronic Banking & Mobile Payments – S. Gurusamy / Dominick Salvatore
5. Introduction to FinTech – Janos Barberis, Douglas W. Amer, Ross P. Buckley

Suggested E-Resources:

1. <https://www.npci.org.in>
2. <https://www.rbi.org.in>

Semester: III	R25-MBA-SEC-311FIN	Basics of FinTech
Credits: 03	Total Marks: 100 (50 FA + 50 SA)	Subject type: Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
311FIN.1	Remembering	DESCRIBE the fundamental concepts, evolution and components of Financial Technology (FinTech).
311FIN.2	Understanding	EXPLAIN the working of digital financial services, payment systems and FinTech business models.
311FIN.3	Applying	APPLY FinTech tools and platforms in banking, payments, lending and investment services.
311FIN.4	Analysing	ANALYZE the role of technologies such as blockchain, AI and big data in financial services.
311FIN.5	Evaluating	EVALUATE FinTech risks, regulatory challenges and cybersecurity issues.
311FIN.6	Creating	DESIGN innovative FinTech-based solutions for financial inclusion and digital finance.

Unit 1 – Introduction to FinTech: Meaning and definition of FinTech; Evolution of FinTech; Traditional finance vs FinTech; Components of FinTech ecosystem – start-ups, financial institutions, regulators and customers. Drivers of FinTech growth; FinTech value chain; Overview of FinTech in India and global scenario; Role of FinTech in financial inclusion. (8)

Unit 2 – Digital Payments and Banking Technology: Digital payment systems – UPI, cards, wallets, AEPS, USSD; Payment gateways and aggregators; RTGS, NEFT and IMPS. Core banking solutions (CBS); Digital banking and neo-banks; Open banking and APIs; Role of FinTech in retail and corporate banking. (8+2)

Unit 3 – FinTech in Lending, Investment and Insurance: Digital lending platforms – P2P lending, crowdfunding; Credit scoring using alternative data; Robo-advisory services. FinTech in capital markets – online trading platforms, algorithmic trading; InsurTech – digital insurance models, usage-based insurance. WealthTech platforms and mutual fund technology solutions. (8)

Unit 4 – Emerging Technologies in FinTech: Blockchain technology – concept, features and applications; Cryptocurrencies and digital assets; Smart contracts. Artificial Intelligence and Machine Learning in finance; Big data analytics; Cloud computing; Internet of Things (IoT) applications in finance. Use cases of emerging technologies in fraud detection and risk management. (8+2)

Unit 5 – Regulation, Risk and Future of FinTech: Regulatory framework for FinTech in India – RBI, SEBI, IRDAI and NPCI; Regulatory sandbox; KYC, AML and data privacy norms. Cybersecurity issues and FinTech risks; Ethical challenges in digital finance. Future trends in FinTech; FinTech business models; Challenges and opportunities for FinTech startups and traditional financial institutions. **(8+1)**

Suggested Books:

1. The FINTECH Book – Susanne Chishti & Janos Barberis, Wiley.
2. Digital Banking – Chris Skinner, Wiley.
3. FinTech: Foundations and Applications – S. P. Jain & T. N. Gupta, McGraw-Hill.
4. Bank 4.0 – Brett King, Wiley.

Suggested Reading:

1. The Business Blockchain – William Mougayar.
2. Artificial Intelligence in Finance – Yves Hilpisch.

Suggested E-Resources:

1. <https://www.rbi.org.in> (FinTech regulation, digital payments, sandbox framework)
2. <https://www.npci.org.in> (UPI, payment systems)
3. <https://nptel.ac.in> (Courses on FinTech, Blockchain and Digital Payments)
4. <https://www.investopedia.com> (FinTech concepts and applications)
5. <https://www.weforum.org> (Reports on global FinTech trends)

Human Resource Management Specialization (Semester-III)

Semester: III	R25-MBA-SCC-307HRM	Strategic Human Resource Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Core Course

Course Objectives:

1. To develop understanding of Strategic Human Resource Management (SHRM) and its role in aligning HR practices with organizational strategies.
2. To familiarize students with strategic workforce planning and human capital management, including the use of HR analytics and technology in decision-making.
3. To enable students to understand the formulation and implementation of HR strategies in dynamic business environments.
4. To provide insights into key HR strategies such as talent management, performance management, compensation, and employee engagement.
5. To develop analytical skills to evaluate HR challenges and practices in Indian and global contexts.
6. To prepare students to design and implement strategic HR frameworks that enhance organizational effectiveness and competitive advantage.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
307HRM.1	Remembering	Recall the key concepts, evolution, and significance of Strategic Human Resource Management in organizations.
307HRM .2	Understanding	Explain the alignment between HR strategies and business strategies and describe the role of human capital in achieving organizational objectives.
307HRM.3	Applying	Apply HR analytics, workforce planning, and talent management concepts in real-world organizational scenarios.
307HRM.4	Analysing	Analyze various HR strategies, challenges, and issues in implementation within dynamic and global business environments.
307HRM.5	Evaluating	Evaluate the effectiveness of HR strategies, compensation systems, and employee engagement practices in enhancing organizational performance.
307HRM.6	Creating	Design strategic HR frameworks, policies, and talent management strategies aligned with business goals and future workforce requirements.

Unit 1- Strategic Foundations of Human Resource Management: Meaning, nature, and objectives of SHRM, Evolution: Personnel → HRM → SHRM → Digital & Agile HR Strategic Fit: Vertical and horizontal alignment, Role of HR as a Strategic Business Partner

Types of HR strategies: Cost leadership, differentiation, innovation Agile and flexible HR strategies, Linking HR strategy with business strategy (case-based discussion). (8)

Unit 2- Strategic Human Capital & It's Components- Human Capital management: Include the role of technology in HCM, Valuation of human resources, Emphasize the importance of measuring HR's ROI, Formulation of HR strategies: Include the role of data-driven decision-making, Strategic HR vs traditional HR: Highlight the differences and benefits of SHRM, Challenges and issues in implementation of HR strategies: Include recent examples from Indian context. (8+2)

Unit 3- Strategic Workforce Planning & HR Architecture: Link between business strategy and workforce planning, HR Planning (HRP): Process and strategic importance, Forecasting HR demand: Quantitative (trend, regression), Qualitative (Delphi, judgmental) Supply forecasting: Internal (succession, talent pools), External (gig economy, outsourcing) Demand-Supply gap analysis and workforce strategies, HR architecture and talent pipelines, Technology-enabled workforce planning. (8)

Unit 4- Strategic Talent & Performance Management: Talent Management strategies: Acquisition, development, retention, Employer branding & talent analytics, Career & Succession Planning: Leadership pipeline, continuous learning, Performance Management systems: KPIs, OKRs, continuous feedback, Compensation & Reward strategies: Variable pay, incentives, ESOPs, flexible benefits, Employee Engagement & Experience (EX): Well-being, work-life balance, hybrid work. (8+2)

Unit 5- Global & Contemporary Perspectives in SHRM: SHRM in global context (IHRM) Globalization and HR challenges, Cross-cultural management: Cultural intelligence (CQ) Diversity, Equity & Inclusion (DEI), OCTAPACE culture and organizational development Global business ethics and governance in HR, Future of Work:, Remote workforce, Industry 4.0 and automation, Sustainability & ESG in HR **Note: Relevant cases/examples must be discussed** (8+1)

Suggested Text Books:

1. Strategic Human Resource Management by Jeffrey A. Mello, Cengage Learning, Latest Edition
2. Strategic Human Resource Management by Michael Armstrong & Stephen Taylor, Kogan Page, Latest Edition
3. Human Resource Management by Gary Dessler, Pearson Education, Latest Edition
4. Strategic Human Resource Management: Contemporary Issues by Randy L. DeSimone, McGraw Hill
5. Strategic Human Resource Management: A Guide to Action by Michael Armstrong, Kogan Page

Suggested Reference Books:

1. HR Scorecard: Linking People, Strategy, and Performance by Brian Becker, Mark Huselid & Dave Ulrich, Harvard Business School Press
2. Human Resource Management by K. Aswathappa, McGraw Hill Education
3. International Human Resource Management by Peter J. Dowling, Cengage Learning
4. Human Resource Management in Practice by Paul Sparrow & Cary Cooper, Kogan Page

Suggested e-resources:

4. <https://www.youtube.com/watch?v=2tYk3V7h6v8>
5. <https://www.youtube.com/watch?v=Q8rG7t2w6qM>
6. <https://www.youtube.com/watch?v=5e0sR7F2bJc>
7. <https://www.shrm.org>
8. <https://hbr.org/topic/human-resource-management>

Semester: III	R25-MBA-SEC-308HRM	HR Operations
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. Provide knowledge of HR operations, personnel administration and evolving digital HR practices.
2. Develop skills for drafting effective HR communication and documentation.
3. Enable learners to handle disciplinary procedures and compliance-based HR actions.
4. Equip students to calculate social security contributions using current legal provisions.
5. Build understanding of compensation and labour welfare legislations.
6. Develop capability to design payroll systems and salary structures using HR technology.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
308HRM.1	Remembering	Describe the structure, functions and digital transformation of HR operations including maintenance of employee records.
308HRM .2	Understanding	Draft and interpret professional HR communications using traditional and digital platforms.
308HRM.3	Applying	Apply disciplinary and grievance-handling procedures in compliance with organizational policies and labour laws.
308HRM.4	Analyzing	Compute statutory contributions and benefits under social security laws using updated provisions and digital systems.
308HRM.5	Evaluating	Evaluate compensation and labour welfare benefits under various labour legislations.
308HRM.6	Creating	Design salary structures and payroll systems incorporating statutory deductions, compliance and HR technology tools.

Unit-1: HR Administration and Digital HR Operations: HR Operations: Meaning, scope and objectives, Structure and functions of HR / Personnel Department, Personnel Policies: Types, formulation and implementation, Maintenance of Employee Records and HR Documentation, Digital Employee Records and e-HR Files, Drafting HR Communication:, Appointment, Promotion, Transfer, Deployment, Appreciation Letters, Notices and Circulars, Use of Email, HR Portals and HRIS for Communication (8)

Unit -2: Discipline, Grievance and Employee Relations: Concept and Importance of Discipline, Principles of Natural Justice, Drafting Disciplinary Communications:, Memo,

Warning Letter, Show Cause Notice, Charge Sheet and Suspension Order, Domestic Enquiry Procedure and Documentation, Termination, Dismissal and, Reinstatement, Grievance Handling Mechanism and Employee Relations Practices, Role of HR in Conflict Resolution (8 + 2)

Unit –3: Social Security Laws and Compliance Management- Overview of Social Security Code and Compliance Environment, Employees' Provident Fund & MP Act, 1952, Applicability, Contributions, Online Account Opening, UAN, PF Forms, Interest, Penalties and Amendments, Employees' State Insurance Act, 1948, Applicability, Contributions and Benefits, Digital ESI Procedures and Calculations, Payment of Compensation – Computation and Legal Provisions, Use of Compliance Software and Online Portals (8)

Unit –4: Compensation, Welfare and Labour Legislations- Workmen's Compensation Act, 1923, Disablement, Death Compensation and Calculations Payment of Bonus Act, 1965, Eligibility, Minimum & Maximum Bonus, Set-on & Set-off Payment of Gratuity Act, 1972, Eligibility, Calculation and Maximum Limit, Recent Amendments and Labour Codes, Emerging Trends in Compensation and Welfare, Flexible Benefits, Employee Well-being Initiatives. (8 + 2)

Unit –5: Payroll Management and HR Technology- Payroll System: Meaning and Components, Designing Salary Structure and CTC, Statutory Deductions: TDS, Professional Tax, PF, ESI, Maintenance of Statutory Returns and Forms, Form 16, 16A, 26AS, Income from Salary and Deductions, Perquisites and Valuation of Rent-Free Accommodation-Payroll Systems, Automation and Outsourced Payroll, Payroll Challenges in Gig and Remote Workforce (8 + 1)

Text Books

1. Personnel Management by C. B. Mamoria, Himalaya Publishing House
2. Dynamics of Personnel Administration by Rudrabasavaraj, Himalaya Publishing House
3. Personnel Management by Edwin B. Flippo, McGraw Hill
4. Industrial and Labour Laws by S. P. Jain, Dhanpat Rai Publications
5. Employee Relations Management by P. N. Singh, Pearson Education

Reference Books

1. Guide on Labour Management Forms and Precedents by S. D. Puri, Taxmann Publications
2. Introduction to Labour and Industrial Laws by Avtar Singh, LexisNexis
3. Elements of Mercantile Law by N. D. Kapoor, Sultan Chand & Sons
4. Bare Acts on Labour Laws (Latest Amendments), Government Publications
5. Dynamics of Industrial Relations by Mamoria & Mamoria, Himalaya Publishing House

E-Resources

1. Ministry of Labour & Employment (India) – Labour laws, notifications and updates
2. EPFO & ESIC Portals – Online compliance procedures and calculators
3. SHRM Online – HR operations, compliance and employee relations resources
4. <https://www.epfindia.gov.in>
5. <https://www.esic.nic.in>
6. <https://labour.gov.in>
7. <https://www.incometax.gov.in>
8. <https://www.shrm.org>

Semester: III	R25-MBA-SEC-309HRM	Competency Based HRM
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. To understand the fundamentals and evolution of competency-based HRM.
2. To explain competency models and their application in HR practices.
3. To apply competency mapping and assessment techniques in HR decisions.
4. To analyze integration of competency frameworks with data-driven HR systems.
5. To evaluate competency-based decisions for rewards, promotions and ethics.
6. To design future-ready competency models aligned with organizational needs.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
309HRM.1	Remembering	Recall fundamental concepts, terminology, frameworks and emerging trends in competency-based HRM.
309HRM.2	Understanding	Explain competency models and their relevance to modern HR practices and organizational strategy.
309HRM.3	Applying	Apply competency concepts in competency mapping, assessment, and digital HR practices.
309HRM.4	Analyzing	Analyze integration of competency models with data-driven HR, talent analytics and workforce planning.
309HRM.5	Evaluating	Evaluate competency-based decisions for rewards, promotions, succession planning and ethical HR practices.
309HRM.6	Creating	Design and develop future-ready, technology-enabled competency models aligned with organizational needs.

Unit-1: Foundations of Competency-Based HRM

Evolution and History of Competency Approach, Definitions and Scope of Competency, Components of Competency: Knowledge, Skills, Attitude, Values and Mindsets, Competence vs Competency – Contemporary Perspectives, Performance vs Potential vs Capability, Types of Competencies: Core, Functional, Behavioral, Technical, Digital, Emotional, Social and Cognitive Competencies, Leadership and Managerial Competencies, Competency Framework: Purpose, Benefits and Limitations, Myths and Misconceptions about Competency Models, Role of Competency in Strategic HRM and Organizational Culture (8)

Unit -2: Competency Development and Models- Need and Importance of Competency Development in Dynamic Business Environment Stages in Developing a Competency Model, Types of Competency Models:, Core / Generic Job-specific and Role-based, Leadership and Future Skills Models, Customized and Hybrid Models, Lancaster Model and Other Global

Competency Frameworks, Competency Maturity Models, Linking Competency Models with Learning & Development (L&D), Role of Competency Models in Talent Management and Succession Planning (8+2)

Unit –3: Competency Mapping and Workforce Planning- Concept and Objectives of Competency Mapping, Steps in Competency Mapping Process Defining Performance Effectiveness:, Key Result Areas (KRA), Key Performance Indicators (KPI), Tools and Techniques for Data Collection, Interviews, Surveys, Focus Groups, Job Analysis, Validation and Reliability of Competency Models, Mapping Competencies for: Recruitment and Selection, Training & Development, Performance, Management, Compensation and Career Planning, Competency Mapping for Future Roles, Gig Workforce and Remote Jobs (8)

Unit –4: Competency Assessment and Measurement- Meaning, Purpose and Benefits of Competency Assessment, Traditional and Modern Competency Assessment Methods, Behavioral Event Interviewing (BEI), Assessment Centers: Design and Operation, Role of Assessors, Tools and Simulations, Digital Assessment Tools and Online Assessment Centers, Integration of Assessment Data and Report, writing, Feedback Mechanisms and Development Planning, Continuous and Developmental Assessments (8+2)

Unit –5: Applications, Analytics and Emerging Trends- Competency-Based HR Decisions using HR Analytics, People Analytics and Skill Gap Analysis, Use of AI, Machine Learning and HR Tech in Competency, anagement, Competency-Based Performance Management Systems, Ethical and Legal Considerations in Competency-Based HRM, ESG and Sustainability Competencies, Emotional Intelligence, Resilience and Well-being Competencies, Future of Work:, Digital Skills, Agile and Adaptive Competencies, Lifelong Learning and Upskilling, Role of HRIS, Cloud HR Platforms and Talent Marketplaces (8+1)

Text Books

1. Armstrong, M. & Baron, A., *Performance Management and Development*, Jaico Publishing House.
2. Armstrong, M., *Performance Management: Key Strategies and Practical Guidelines*, Kogan Page.
3. Bagchi, S. N., *Performance Management*, Cengage Learning India.
4. Bhattacharyya, D. K., *Performance Management Systems and Strategies*, Pearson Education.

Reference Books

1. Sanghi, S., *Handbook of Competency Mapping*, Response Books.
2. Shermon, G., *Competency Based HRM*, Tata McGraw Hill.
3. Whiddett, S. & Hollyforde, S., *A Practical Guide to Competencies*, CIPD.
4. Boudreau, J. & Ramstad, P., *Beyond HR: The New Science of Human Capital*.

5. Ulrich, D. et al., *HR Competencies for the Future*, Latest Edition.

E-Resources

1. NPTEL / SWAYAM – Courses on HRM, Talent Management, Performance Management
2. Coursera – Competency Mapping, HR Analytics, Talent Management courses

Semester: III	R25-MBA-SEC-310HRM	HR Analytics
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. Introduce learners to the fundamentals of HR analytics, Industry 4.0, and data-driven HR management.
2. Develop conceptual understanding of HR analytics frameworks, tools, and strategic applications.
3. Enable application of analytical methods to solve real-world HR and workforce challenges.
4. Enhance analytical skills to assess organizational analytics maturity and HR digital readiness.
5. Build evaluative capability to link HR metrics and analytics outcomes with business performance.
6. Foster innovative thinking to design predictive, ethical, and technology-enabled HR practices.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
310HRM.1	Remembering	Recall core concepts of Industry 4.0, data analytics, artificial intelligence, and business intelligence in the context of HRM.
310HRM.2	Understanding	Explain the scope, framework, and strategic relevance of HR Analytics, including ethical, legal, and data privacy issues.
310HRM.3	Applying	Apply HR analytics tools and techniques to support evidence-based decisions in recruitment, learning, performance, and retention.
310HRM.4	Analyzing	Analyze the maturity and readiness of organizations for HR analytics using analytics maturity models and digital capability frameworks.
310HRM.5	Evaluating	Evaluate the contribution of HR analytics to business performance, innovation, and competitive advantage.
310HRM.6	Creating	Design predictive and prescriptive HR solutions using analytics and digital strategies for effective workforce management.

Unit 1: Digital Transformation & HR Analytics Foundations

Evolution of Industry 4.0 and digital transformation, impact on Human Resource Management, role of data and analytics in HR decision-making, overview of big data and AI in HR, fundamentals of machine learning for HR professionals, applications of business

intelligence in HR dashboards and reporting. Digital workforce and future of work, Basics of Generative AI in HR (resume screening, JD creation, policy drafting).Data literacy for HR managers (8)

Unit 2: HR Analytics Frameworks, Ethics, and Maturity Models

Definition, scope, and strategic significance of HR analytics, role of evidence-based HR and data-driven decision-making, roles and responsibilities of HR, IT, and business leaders in analytics initiatives, ethical issues, data privacy, and governance in HR analytics. Analytics maturity models: Gartner's Analytics Maturity Model, HR analytics capability assessment, aligning analytics maturity with organizational strategy and digital transformation. HR analytics governance and compliance, Responsible and ethical use of AI in HR (8+2)

Unit 3: Linking HR Analytics to Business Strategy and Outcomes

Strategic role of innovation and analytics in competitive advantage, aligning HR analytics with business goals, identifying HR metrics and KPIs linked to productivity, innovation, and organizational performance, ROI of HR (8)

Unit 4: Applications of HR Analytics in Core HR Functions

Use of analytics in talent acquisition and recruitment, learning and development analytics, skill gap and competency mapping, performance management analytics, compensation and benefits optimization, employee engagement and retention analytics. Predictive analytics for workforce planning and attrition, scenario planning and workforce forecasting. People analytics tools and HR dashboards, Analytics-supported policy redesign and digital HR strategies. AI in Recruitment, AI in L&D, AI in Performance, AI in Engagement, AI in Retention. (8+2)

Unit 5: Learning from Practice – Cases and Emerging Trends

Case studies and best practices in HR analytics across industries (minimum five cases), challenges in implementation, analytics adoption barriers, change management for analytics-driven HR. Emerging trends: generative AI, augmented analytics, and people intelligence, HR analytics in gig and remote workforce management (8+1)

Text Books

1. Soundararajan, Ramesh & Singh, Kuldeep, *Winning on HR Analytics: Leveraging Data for Competitive Advantage*, Sage Publications.
2. Waters, Shonna D., Streets, Valerie N., McFarlane, Lindsay & Johnson-Murray, Rachael, *The Practical Guide to HR Analytics*, Wiley.
3. Byerly, Boyce & Yesudas, Gene, *Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset*, McGraw Hill.

Reference Books

1. Bassi, Laurie & McMurrer, Daniel, *Good Company: Business Success in the Worthiness Era*, Berrett-Koehler.

2. Fitz-enz, Jac & Mattox, John, *Predictive Analytics for Human Resources*, Wiley.
3. Rasmussen, T., & Ulrich, D., *HR Transformation: From Analytics to Impact*, McGraw Hill.
4. Davenport, Thomas H. & Harris, Jeanne G., *Competing on Analytics*, Harvard Business School Press.

E-Resources

Online Learning Platforms

- **NPTEL** – HR Analytics, Data Analytics, and AI for Managers
- **SWAYAM** – Data-driven decision-making and HRM courses
- **Coursera / edX** – People Analytics, AI in HR, Workforce Analytics

Semester: III	R25-MBA-SEC-311HRM	Labour Welfare and Employee Well-being
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. Provide foundational knowledge on the origin, historical development, and evolution of labour welfare in India and in the global context.
2. Develop conceptual clarity regarding the concepts, philosophy, principles, and legal framework of labour welfare, including statutory and non-statutory welfare measures.
3. Enable application of labour welfare principles and laws to real-world organizational situations, industry practices, and case-based scenarios.
4. Facilitate analytical understanding of the relationship between labour welfare, employee well-being, engagement, and organizational productivity.
5. Build evaluative skills to assess the effectiveness, impact, and ethical implications of labour welfare initiatives on employee performance and quality of work life.
6. Encourage creativity and innovation in designing inclusive, technology-enabled, and sustainable labour welfare programs suited to contemporary and future workplaces.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
311HRM.1	Remembering	Recall the origin, evolution, and legal framework of labour welfare in India and globally.
311HRM.2	Understanding	Explain the concepts, principles, and contemporary philosophy of labour welfare including ESG and sustainability perspectives.
311HRM.3	Applying	Apply labour welfare laws and practices to organizational and industry-level scenarios.
311HRM.4	Analysing	Analyze the linkage between labour welfare, employee well-being, engagement, and organizational productivity.
311HRM.5	Evaluating	Assess the effectiveness of labour welfare initiatives with respect to inclusivity, mental health, and ethical compliance.
311HRM.6	Creating	Design innovative, technology-driven, and inclusive labour welfare programs for modern workplaces.

Unit 1: Foundations of Labour Welfare

Origin and historical development of labour welfare in India and abroad, objectives and need for labour welfare, importance in the modern workplace, classification and scope of labour welfare, agencies of labour welfare, concepts, philosophy, and principles of labour welfare. Labour welfare from an ESG (Environmental, Social & Governance) perspective, Labour welfare and Sustainable Development Goals (SDGs), Case Study: Labour welfare practices in a leading Indian organization (8)

Unit 2: Labour Welfare Laws, Policies, and Institutions

Statutory labour welfare facilities in India under Factories Act, 1948; Bombay Shops & Establishments Act, 1948; role of trade unions, NGOs, and local self-government bodies; laws relating to elimination of child labour; non-statutory welfare facilities. Labour Codes and their implications on welfare (Code on Social Security, OSH Code – overview), Comparative labour welfare practices: India vs. selected countries Case Study: Labour welfare practices in IT and manufacturing industries (8+2)

Unit 3: Employee Well-being, Engagement, and Productivity

Concept of employee well-being, relationship between labour welfare and productivity, strategies to enhance employee well-being, role and functions of Labour Welfare Officer, labour administration in India .Mental health, work-life balance, and burnout management, Employee engagement and wellness analytics Case Study: Employee well-being initiatives in a leading organization (8)

Unit 4: Labour Welfare Programs, Services, and Digitalization

Types of labour welfare programs: health, education, housing, recreation; labour welfare services such as counselling and employee assistance programs; working conditions, safety, and accident prevention; functions of labour welfare officers in India. Role of HR technology and digital platforms in labour welfare, Use of AI, HRIS, and mobile apps for welfare delivery Case Study: Digital labour welfare programs in a modern organization (8+2)

Unit 5: Contemporary Issues, Inclusion, and Future Trends

Challenges in implementing labour welfare programs, future trends in labour welfare, problems of women labour. Labour welfare for gig workers, contract workers, and platform employees, Inclusive welfare: women, migrant labour, persons with disabilities (PwDs), Ethical issues and corporate accountability in labour welfare Case Study: Challenges and opportunities in labour welfare in emerging industries (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. **Mamoria, C.B. & Mamoria, S.** *Dynamics of Industrial Relations and Labour Welfare*. Himalaya Publishing House, Mumbai.
2. **K. Aswathappa.** *Human Resource Management – Text and Cases*. McGraw Hill Education (India).
3. **Venkata Ratnam, C.S.** *Globalization and Labour Management Relations* Oxford University Press, New Delhi.

Suggested Reference Books:

1. **P. Subba Rao.** *Human Resource Management*. Himalaya Publishing House.

2. **Michael Armstrong.***Armstrong's Handbook of Human Resource Management Practice*. Kogan Page, London.
3. **Monappa, Arun & Saiyadain, Mirza S..***Personnel Management*. Tata McGraw-Hill, New Delhi..
4. **Giri, V.V..***Labour Problems in Indian Industry*. Asia Publishing House.
5. **ILO.***Introduction to Labour Welfare and Social Security*. International Labour Organization Publications.
6. **Dessler, Gary.***Human Resource Management*. Pearson Education.

Suggested e-resources:

1. Ministry of Labour & Employment, Government of India
<https://labour.gov.in>
2. Directorate General Factory Advice Service & Labour Institutes (DGFASLI)
<https://dgfasli.gov.in>
3. International Labour Organization (ILO) <https://www.ilo.org>
4. **SWAYAM (MOOCs – Government of India)** Courses on Labour Laws, Industrial Relations, HRM
5. **NPTEL** Online lectures on HRM, Industrial Relations, and Labour Laws
6. **Coursera / edX** Courses on employee well-being, workplace mental health, and HR analytics

Operations & Supply Chain Management Specialization

(Semester-III)

Semester -III	R25-MBA-SCC-307OSCM	Facilities Management
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
307OSCM.1	Remembering	DESCRIBE the concepts and overview of Production Facilities.
307OSCM.2	Understanding	EXPLAIN the key considerations in Manufacturing Systems
307OSCM.3	Applying	ILLUSTRATE the use of the concepts and principles of product design & development
307OSCM.4	Analysing	EXAMINE the practical layouts in real world in light of the theoretical concepts and principles of Facilities management.
307OSCM.5	Evaluating	EVALUATE various approaches to Facilities management.
307OSCM.6	Creating	REARRANGE existing layouts for enhanced outcomes

UNIT 1. Overview of Production Facility: Concept of Production & Production Management, Decision at different levels of production management, Objectives of production management, functions of production management, Organizational structure, relationship of production department with other departments, History of Production Management (8)

UNIT 2. Manufacturing System: Manufacturing Systems-Intermittent System-Job Production, Batch Production, Project Production, Continuous System-Mass production, Process Production, Other types of production- Make to stock production, Make to order production, Assembly to order production system, Comparison of various manufacturing systems. (8+2)

Unit 3. Product Design & Development: Product design & development department, Duties of Product designer, Factors determining design of product, Essentials of good design, Product life cycle, Steps in new product design & development, Product analysis- Marketing aspect, Product characteristics, Economic analysis, Tools for Product development-standardization, simplification, specialization, diversification. (8)

UNIT 4. Plant Location: Importance of Plant location, How to select a site, Factors affecting plant location, Selection of site-Urban, Rural, Suburban, comparison of selection sites, Recent trends in the location of Industries. (8+2)

UNIT 5. Plant Layout: Objectives of Plant Layout, Factors affecting plant layout, Principles of good layout, Advantages of good layout, Types of layout, Layout procedures, flow system, vertical flow system, Horizontal flow system, Tools & Techniques of plant layout, Introduction to computerized techniques of plant layout. (8+1)

Suggested Text Books:

1. Industrial Engineering & Production & Operations Management, Sanjay Patil, Nandkumar Hukeri, Electrotech Publication
2. Industrial Engineering & Production Management, Martand Telsang, S. Chand
3. Operations Management Theory & Practice, B. Mahadevan, Pearson.
4. Production and Operations Management, R B Khanna, PHI, New Delhi.
5. Production & Operations Management, S N Chary, McGraw Hill.
6. Supply Chain Management - Strategy, Planning & Operation, Sunil Chopra, Peter Meindl, D. V. Kalra, Pearson Education.

Suggested Reference Books:

1. Supply Chain Logistics Management, Donald Bowersox, David Closs, M Bixby Cooper, Tata McGraw Hill.
2. Operations Management, William J. Stevenson, TMGH.
3. Operations Management, Lee Krajewski, Larry Ritzman, Manoj Malhotra, Pearson Education.

E-Resources:

1. <https://www.youtube.com/watch?v=52VcoVTsVUY>
2. https://www.youtube.com/watch?v=_VJkKZFuRvE
3. <https://www.youtube.com/watch?v=6fssYwsXVfI>

Semester -III	R25-MBA-SEC-308OSCM	Quality Management
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
308OSCM.1	Remembering	DESCRIBE the concepts and overview of Quality Management.
308OSCM.2	Understanding	EXPLAIN the key considerations in Quality Management
308OSCM.3	Applying	ILLUSTRATE the use of the concepts and principles of Quality Management & development
308OSCM.4	Analysing	EXAMINE the practical layouts in real world in light of the theoretical concepts and principles of Quality Management.
308OSCM.5	Evaluating	EVALUATE various approaches to Quality Management.
308OSCM.6	Creating	Create solution oriented quality technique

UNIT 1. Introduction to Quality control: Meaning & concept of quality, Quality control-steps in quality control, objectives/purpose of quality control, importance of quality control, functions of quality control, cost of quality, effects of poor quality, quality of design, quality of performance, conformance, specifications of quality, quality policy, contents of quality policy. (8)

UNIT 2. Inspection in Manufacturing: Concept of Inspection, objectives of inspection, difference between quality control & inspection, basic elements of inspection planning, quality control of purchased material, vendor selection & rating, Vendor inspection & quality control, Process of Inspection, Final inspection, Quality evaluation/complaint analysis. (8+2)

UNIT 3. Quality Assurance: Concept, Definition, Functions & advantages of quality assurance, acceptance function, prevention function, coordination function, organization setup & responsibilities, Internal structure of quality control department & responsibilities, responsibilities of quality control engineers, value & cost of quality, quality consciousness, quality budget, quality audit/survey.(8)

UNIT 4. Quality circle & TQM: Quality circle concept, benefits of quality circle, organization for quality circle, working of quality circle, technique of quality circle to solve problems- brain storming, data collection, Ishikawa diagram, Pareto analysis. (8+2)

UNIT 5. Total Quality Management: Concept of TQM, Objectives of a TQM system, areas of TQM system, Dr. Demings & Crosbys 14 point so f TQM, Benefits of TQM, Steps in

implementing TQM, Tools & Techniques, Concept & Introduction to ISO series, Concepts of JIT, Kaizen, 5s, & Six Sigma, Benchmarking. (8+1)

Suggested Text Books:

1. Industrial Engineering & Production & Operations Management, Sanjay Patil, Nandkumar Hukeri, Electrotech Publication
2. Industrial Engineering & Production Management, Martand Telsang, S. Chand
3. Operations Management Theory & Practice, B. Mahadevan, Pearson.
4. Production and Operations Management, R B Khanna, PHI, New Delhi.
5. Production & Operations Management, S N Chary, McGraw Hill.
6. Supply Chain Management - Strategy, Planning & Operation, Sunil Chopra, Peter Meindl, D. V. Kalra, Pearson Education.

Suggested Reference Books:

1. Supply Chain Logistics Management, Donald Bowersox, David Closs, M Bixby Cooper, Tata McGraw Hill.
2. Operations Management, William J. Stevenson, TMGH.
3. Operations Management, Lee Krajewski, Larry Ritzman, Manoj Malhotra, Pearson Education.

E-Resources:

1. <https://www.youtube.com/watch?v=52VcoVTsVUY>
2. https://www.youtube.com/watch?v=_VJkKZFuRvE
3. <https://www.youtube.com/watch?v=6fssYwsXVfI>

Semester -III	R25-MBA-SEC-309OSCM	Logistics Management
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
309OSCM.1	Remembering	DEFINE basic terms and concepts related to Logistics management.
309OSCM.2	Understanding	EXPLAIN the infrastructure of logistics, its linkage with various types of communication modes
309OSCM.3	Applying	DESCRIBE the various dimensions of logistics management and transport, their inter-linkages with different types of freights.
309OSCM.4	Analysing	CALCULATE logistic costs and various classification methods of reducing the cost. Involving the information technology & its impacts.
309OSCM.5	Evaluating	OUTLINE a typical logistic framework and services. ILLUSTRATE the linkages with its dynamic storage system / Customer Issues, Logistic and Business Issues in a real world context
309OSCM.6	Creating	DISCUSS modern real world logistical systems using the various concepts in the syllabus.

UNIT 1. The Principles of Logistics: Definitions and Significance of Logistics. Logistical System of Services Elements of Logistics, Distinction between Procurement Logistics, Production Logistics and Distribution Logistics, Service Level, Logistics and Corporate Strategy, Supply Chains and Networks. (8)

UNIT 2. Logistics Systems: Logistical Infrastructure, Basic Terminology, Types and Functions, Transport Infrastructure and Superstructure, Transport Routes and Transport Networks, Logistics Real Estate, Logistics Parks, & Freight Villages, Information Infrastructure and Communication Infrastructure, Telecommunication Infrastructure, Satellite Systems and Satellite Navigation.(8+2)

UNIT 3. Transport Systems and Logistics Services: Transport Basics, Significance and Development, Modes of Transport and Transport Technologies, Transport Value and Transport Affinity, Road Freight Transport, Rail Freight Transport, Sea Freight Transport, Inland Waterway Transport, Air Freight Transports, Pipeline Transport. (8)

UNIT 4. Logistics Service Providers: Carriers and Forwarders, Courier, Express Parcel and Mail Service Providers, Systems Service Providers and Contract Logistics Providers. IT in

Logistics, Communication Standards, Identification Standards, Classification of IT in the Fields of Inventory and Warehousing. (8+2)

UNIT 5. Warehousing, Handling, and Picking Systems: Warehousing, Handling, and Picking Systems, Warehousing Basics, Storage Facilities, Static Storage Systems, Dynamic Storage Systems, Conveyors, Discontinuous Conveyors, Continuous Conveyors, Sorters, Packages, Loading Units, and Load Carriers, Picking and Handling, Warehouse Organization, Inventory, Stock and Provisioning Management. (8+1)

Suggested Text Books:

1. Industrial Engineering & Production & Operations Management, Sanjay Patil, Nandkumar Hukeri, Electrotech Publication
2. Industrial Engineering & Production Management, Martand Telsang, S. Chand
3. Operations Management Theory & Practice, B. Mahadevan, Pearson.
4. Production and Operations Management, R B Khanna, PHI, New Delhi.
5. Production & Operations Management, S N Chary, McGraw Hill.
6. Supply Chain Management - Strategy, Planning & Operation, Sunil Chopra, Peter Meindl, D. V. Kalra, Pearson Education.

Suggested Reference Books:

1. Supply Chain Logistics Management, Donald Bowersox, David Closs, M Bixby Cooper, Tata McGraw Hill.
2. Operations Management, William J. Stevenson, TMGH.
3. Operations Management, Lee Krajewski, Larry Ritzman, Manoj Malhotra, Pearson Education.

E-Resources:

1. <https://www.youtube.com/watch?v=52VcoVTsVUY>
2. https://www.youtube.com/watch?v=_VJkKZFuRvE
3. <https://www.youtube.com/watch?v=6fssYwsXVfI>

Semester -III	R25-MBA-SEC-310OSCM	Industry 4.0
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
310OSCM.1	Remembering	DESCRIBE the drivers, enablers and compelling forces for Industry 4.0's advancement.
310OSCM.2	Understanding	UNDERSTAND the power of Cloud Computing in a networked economy
310OSCM.3	Applying	IDENTIFY the opportunities, challenges brought about by Industry 4.0
310OSCM.4	Analysing	OUTLINE the various systems used in a manufacturing plant and their role in an Industry 4.0 paradigm.
310OSCM.5	Evaluating	APPRAISE the smartness in Smart Factories, Smart cities, smart products and smart services.
310OSCM.6	Creating	PREDICT how organizations and individuals should prepare to reap the benefits.

UNIT 1. Introduction to Industry 4.0: Overview of the Various Industrial Revolutions, Digitization and the Networked Economy, Industry 4.0 Paradigm, Industry 4.0 characteristics – Interoperability, Virtualization, Decentralization, Real- time capability, Service orientation, Modularity, Convergence, Cost reduction and efficiency, Mass customization. Drivers, Enablers, Compelling Forces and Challenges for Industry 4.0, Evolution in USA, Europe, China and other countries, Comparison of Industry 4.0 Factory and Today's Factory, Trends of Industrial Big Data and Predictive Analytics for Smart Business Transformation. (8)

UNIT 2. Key Building Blocks: Internet of Things (IoT), Industrial Internet of Things (IIoT), Internet of Services, Smart Manufacturing, Smart Devices and Products, Smart Logistics, Smart Cities, Predictive Analytics. (8+2)

UNIT 3. Technological Ecosystem: Technologies for enabling Industry 4.0, Cyber physical Systems, Robotic Automation and Collaborative Robots, Support System for Industry 4.0, Mobile Computing, Related Disciplines, Issues of Cyber Security. (8)

UNIT 4. Data as a resource: Role of data, information, knowledge and collaboration in future organizations, Resource- based view of a firm, Data as a new resource for organizations, Harnessing and sharing knowledge in organizations, Cloud Computing Basics, Cloud Computing & Industry 4.0 (8+2)

UNIT 5. Applications and the way ahead: Automotive, Agriculture, Retail, Healthcare, Fintech, Manufacturing, Applications and Case Studies: Industry 4.0 laboratories , IIoT case studies, Business issues in Industry 4.0 - Opportunities and Challenges, Future of Works and Skills for Workers in the Industry 4.0 Era, Strategies for competing in an Industry 4.0 world. (8+1)

Suggested Text Books:

1. Industry 4.0: Managing The Digital Transformation, Ustundag, Alp, Cevikcan, Emre, Springer.
2. Hands-On Industrial Internet of Things: Create a powerful Industrial IoT infrastructure using Industry 4.0 , Giacomo Veneri.

Reference Books:

1. Internet of Things: A Hands-On Approach , Arsheep Bahga.
2. Industry 4.0: The Industrial Internet of Things Paperback, Alasdair Gilchrist.

Semester -III	R25-MBA-SEC-311OSCM	Supply Chain Management
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
311OSCM.1	Remembering	DESCRIBE the key concepts of Supply Chain Management and the – driving forces in contemporary Supply Chain Management.
311OSCM.2	Understanding	EXPLAIN the structure of modern-day supply chains.
311OSCM.3	Applying	IDENTIFY the various flows in real world supply chains.
311OSCM.4	Analysing	COMPARE and CONTRAST push and pull strategies in Supply Chain Management.
311OSCM.5	Evaluating	EXPLAIN the key Operational Aspects in Supply Chain Management.
311OSCM.6	Creating	DISCUSS the relationship between Customer Value and Supply Chain Management

UNIT 1. Supply Chain Structure: Shift from enterprise to network, Structure of a SC, Push based SC, Pull based SC, Tradeoff between Push & Pull, Identifying appropriate Push & Pull Strategy for SC, Commodity & cost centric SC, Agile SC (8)

UNIT 2. Flows in SC: Forward & Reverse SC, Product, Services, Information, Funds, Demand, Forecast flows in Upstream & Downstream direction (8+2)

UNIT 3. Total SCM: Changing business landscape – driving forces: Shift from Operations to Services, Impact of globalization & technological revolution, Shift from linear SC to collaborative networks, power shifts in the SC- demands for flexibility of partnerships, core competencies, growth in outsourcing, Increased complexity of processes (8)

UNIT 4. SCM Building Blocks: Overview of customer focus & demand, resources & capacity management, procurement & supplier focus, inventory management, operations management, distribution management in SCM. Key Operational Aspects in SC: Creating the Lean SC – JIT Purchasing, JIT Transportation and JIT Production. Kanban, VMI (8+2)

UNIT 5. Customer Value: Empowered consumer, Customer focused Marketing & SC service outputs, customer service –availability, operational performance, reliability. Customer satisfaction – customer expectations, enhancing customer satisfactions, limitations of customer satisfaction. Customer success – achieving customer success, value added services, customer value requirement mapping (8+1)

Suggested Text Books:

1. Supply Chain & Logistics Management, Bowersox, Closs & Cooper, Tata McGraw Hill
2. Designing & Managing the SC – Concepts, Strategies & Case studies, Levi, Kaminsky et. al., Tata McGraw Hill
3. Supply Chain Management: Strategy Planning & Operations, Sunil Chopra, Peter Meindl, Pearson

Reference Books:

1. Supply Chain Management Process, System & Practice, N.Chadrasedkaran, Oxford
2. Total Supply Chain Management, Basu & Wright, Elsevier
3. Logistics Management & Strategy, Harrison and van Hoek, Prentice Hall
4. Supply Chain Management, Mentzer, Response Books.
5. Logistics Management: The Supply Chain Imperative, Vindo Sople, Pearson Education.

Data Science & Business Analytics Management Specialization (Semester-III)

Semester: III	R25-MBA-SCC-307DSBA	Software Project Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Core Course- Compulsory

Course Objectives:

1. To understand the fundamental principles and concepts of software project management (SPM).
2. To enable students to evaluate the feasibility and desirability of new software proposals.
3. To provide comprehensive knowledge of management techniques.
4. To develop managerial and team leadership capabilities.
5. To acquire skills for risk, quality, and contract governance.
6. To develop and implement complete software project plans and management artifacts using standard frameworks such as Project Management Institute guidelines

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
307DSBA.1	Remembering	Define and understand the role of defining and tailoring the software process and accurately
307DSBA.2	Understanding	To evaluate new software proposals by conducting a detailed Feasibility Study, assessing project viability across dimensions
307DSBA.3	Applying	To apply standardized estimation techniques like Function Point Analysis and the COCOMO Model
307DSBA.4	Analyzing	To analyze complex organizational and human resource factors, differentiating types of teams and examining personality traits and leadership models for effective team development and management
307DSBA.5	Evaluating	To create formal governance and control artifacts, including risk mitigation strategies, quality assurance plans, and project closure reports, ensuring all project work products comply with defined standards.
307DSBA.6	Creating	Design and develop complete software project management artifacts including project plans, reports for real-world software projects.

Unit 1- Software Project Foundations and Process Models: Introduction & Scope: Software Project Management (SPM) Concepts, including the 3 P's (People, problem, and process). Importance of Project Management and integration of projects with Organizational Strategy. Software Process Models: Defining, Tailoring, and Improving the Software Development Process. Software Process Models: Waterfall Model (Linear Sequential Model), Prototyping Model, RAD Model, Incremental Model, Spiral Model, and Component Assembly Model (CBM). Software Lifecycle: Phases of the Software Development Life

Cycle (SDLC) including Planning, Requirements, Design, Build, Test, Deploy, and Maintain. (8)

Unit 2- Project Planning, Metrics, and Estimation: Planning & Structure: Software Project planning objectives and scoping. Approaches to planning: Top-Down and Bottom-Up Planning. Work Breakdown Structure (WBS) development and integrating the WBS with the organization. Metrics and Measurement: Metrics in the process and project domains. Software measurement categories: size-oriented metrics and function-oriented metrics (including extended function point metrics). Integrating metrics within the software process. Cost Estimation: Effort Estimation problems and techniques. Empirical estimation models, specifically the COCOMO model (Constructive Cost Model), for predicting effort and schedule based on size, Putnam Resource Allocation Model. (8+2)

Unit 3- Scheduling, Outsourcing, and Risk Management: Scheduling and Control: Project Scheduling and tracking, including the relationship between people and effort. Identifying Critical Path and Network Planning Models. Schedule Monitoring Tools: Gantt Chart, PERT Chart (Program Evaluation and Review Technique), and Critical Path Method (CPM) Resource Allocation. Sourcing and Contracts: The Make-Buy decision using a decision tree analysis. Software outsourcing issues involved. Managing Contracts (types, stages, acceptance, and legal aspects). Risk Management: Reactive and Proactive risk strategies. Risk identification, projection, mitigation, monitoring and the RMMM Plan (Risk Mitigation, Monitoring, and Management). Qualitative and Semi-quantitative risk assessment (8)

Unit 4- Requirements Definition and Software Quality Assurance: Requirements Engineering: Understanding the Customer Problem and Product Objectives. Initial Investigation and Strategies for determining information requirements (e.g., Interviewing, Questionnaires), Problem Solving & Specification: Defining the Final Product Specifications. Tools for requirements analysis: Data Flow Diagram (DFD), Data Dictionary, Structured English (Pseudocode), Decision Trees, and Decision Tables, Feasibility Study (Economic, Technical, Operational, Schedule, Legal). Software Quality Assurance (SQA): Software Quality definition (fitness of purpose). Quality Measures, including FURPS (Functionality, Usability, Reliability, Performance, Supportability), SQA process and plan (SQAP). Formal Technical Review (FTR) objectives and process. (8+2)

Unit 5- Teams, Testing, Governance, and Project Closure: Team Management: Software Development Team roles (Project manager, Developers, Designers, QA, Business Analyst, etc.). Leadership in SPM and personality traits. Managing Project Teams, including team development models and handling virtual/cross-cultural teams. Testing: Software Testing process and Test Plan. Verification and Validation. General Testing Methods: White Box and Black Box Testing. Specific testing methods: Unit Testing, System Integration Testing, Validation Testing, and System Testing. Governance & Control: Project Integration Management (Selection, Approval, Change Control). Software configuration management (SCM) process and standards. Project Governance principles (Accountability, Transparency and Decision-making). Review and Closure: Project Review (Tracking Meetings, Recovery

plans, Escalation Meetings), Project Closure: types and activities, Post implementation evaluation, and Retrospectives. (8+1)

Suggested Text Books:

1. Roger Pressman, Software Engineering: A Practitioner's Approach.
2. Robert T. Futrell, Donald F. Shafer, and Linda I. Safer, Quality Software Project Management.
3. Bob Hughes and Mike Cotterell, Software Project Management.
4. Clifford Gray, Erik Larson and Gautam Desai, Project Management, The Managerial Process.

Suggested Reference Books:

1. Clifford Gray, Erik Larson, and Gautam Desai, Project Management, The Managerial Process (Tata McGraw Hill).
2. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide) (PMI Publication).
3. Prasanna Chandra, Projects, Planning, Analysis, Selection, Financing, Implementation and Review (Tata McGrawHill).
4. Harold Kerzner, Project Management Metrics, Kpis, And Dashboards - A Guide to Measuring and Monitoring Project Performance (PhD).
5. Samuel Mantel, Jack Meredith, Scott Shafer, Margret Sutton, and MRGopalan, Project Management (Wiley India).

Suggested E-Resources:

1. PMI Website (<https://www.pmi.org.in/>)
2. APM Website (<https://www.apm.org.uk/>).
3. NPTEL/SWAYAM Courses

Semester: III	R25-MBA-SEC-308DSBA	Business Intelligence
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objectives:

1. To Establish fundamental architectural knowledge and data strategy.
2. To master Business Performance Management (BPM).
3. To gain expertise in pattern extraction through Data Mining.
4. To acquire proficiency in unstructured data analysis.
5. To evaluate managerial and governance complexities.
6. To design BI-based solutions for data-driven decision-making using analytics, visualization, and governance tools.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
308DSBA.1	Remembering	Understand core concepts, characteristics, and architectures of Data Warehousing (DW) and BI frameworks.
308DSBA.2	Understanding	Analyze business activities using BPM cycles and distinguish BPM from BI functions.
308DSBA.3	Applying	Apply various Data Mining methods for extracting meaningful patterns from data.
308DSBA.4	Analyzing	Use advanced analytical techniques to interpret structured and unstructured data.
308DSBA.5	Evaluating	Evaluate BI implementation projects, assessing effectiveness, performance, and governance.
308DSBA.6	Creating	Design and develop end-to-end BI solutions integrating DW, ETL, analytics, BPM dashboards, and governance for actionable business insights.

Unit 1- Business Intelligence (BI) Foundations and Architecture: Introduction to BI: Definition, History, Framework, Architecture, and benefits of BI. BI Governance: Intelligence creation and use of BI governance. BI Context: Transaction processing versus analytic processing. BI Implementation: Developing or acquiring BI, Justification and Cost-benefit analysis, Security and protection of privacy, Integration of systems and applications, BI tools and techniques, and Major vendors. (8)

Unit 2- Data Warehousing (DW) Concepts and Design: DW Definition and Structure: Definition and concepts of Data Warehousing, Characteristics, Data marts, Operational data stores, Enterprise data warehouse, and metadata. DW Process and Integration: Data warehouse process overview, Data integration, and ETL (Extraction, Transformation, Loading). DW Development: Vendors, Development approaches, Representation of data in data warehouse. OLAP vs. OLTP: Comparison of Online Analytical Processing (OLAP) and

Online Transaction Processing (OLTP), including OLAP operations. 4. DW Management: Implementation issues of data warehouse, Administration, security and future trends of data warehouse (8+2)

Unit 3- Business Performance Management (BPM): BPM Overview: Overview, Definition, and the distinction between BPM and BI (BPM Vs BI). BPM Processes: The cyclical process: Strategize, Plan, Monitor, Act and Adjust of BPM. Performance Management: General performance management concepts. BPM Technology: BPM methodologies, technologies and applications, including Performance dashboards and scoreboards. (8)

Unit 4- Data Mining for Business Intelligence: Data Mining Fundamentals: Concepts, definitions, applications, process, and methods of Data Mining for business intelligence. Modeling Techniques: Clustering methods, meta heuristics. Advanced Techniques: Artificial neural networks for data mining, and data mining software tools. (8+2)

Unit 5- Text Mining, Web Mining, and BI Governance Issues: Text Mining: Concepts and definitions of text mining, Natural language processing (NLP), Applications, Process, and Tools. Web Mining: Overview, web content mining, Web structure mining, and Web usage mining. BI Implementation & Ethics: Overview of BI implementation factors and managerial issues, BI and integration implementation, Connecting BI systems to databases and other systems, On demand BI. Social and Legal Context: Issues of legality, privacy and ethics, Social networks and BI for collaborative decision making, and RFID and new BI application opportunities. (8+1)

Suggested Text Books:

1. Turban, E., Sharda, R., Delen, D. and King, D., Business Intelligence- A Managerial Approach (Pearson Education, New Delhi, 2012)
2. Sonar, R.M., Next generation Business Intelligence – A Knowledge Based Approach (VIKAS Publications, New Delhi, 2011)

Suggested Reference Books:

1. Hair Joseph F., Multivariate Data Analysis (Cengage Learning India)
2. J. Han and M. Kambar, Data Mining: Concepts and Techniques (Morgan Kaufman)
3. Trevor Hastie, Robert Tibshirani, and Jerome Friedman, The Elements of Statistical Learning: Data Mining, Inference, and Prediction (Springer)

Suggested E-Resources:

1. <https://nptel.ac.in/courses/110/104/110104073/>
2. <https://nptel.ac.in/courses/110/107/110107081/>

Semester: III	R25-MBA-SEC-309DSBA	Excel for Data Science
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objectives:

1. Understand Excel's role as a data science tool for business analytics and decision-making.
2. Apply advanced Excel functions and tools to clean, analyze, and visualize structured datasets.
3. Analyze business data using statistical, predictive, and inferential techniques.
4. Evaluate business scenarios using dashboards, forecasting models, and optimization tools.
5. Design automated, data-driven solutions for real-world business problems using Excel.
6. Develop and implement advanced Excel-based analytical models and decision-support systems using tools such as Microsoft Excel, including Power Query, PivotTables, and Solver, for real-world business applications.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
309DSBA.1	Remembering	Recall core Excel functions, data structures, statistical concepts, and analytical terminology used in business data analysis.
309DSBA.2	Understanding	Explain data wrangling workflows, exploratory analysis techniques, and visualization principles for business datasets.
309DSBA.3	Applying	Apply Excel tools such as Power Query, PivotTables, statistical functions, and Solver to solve structured business problems.
309DSBA.4	Analyzing	Analyze datasets to identify patterns, relationships, trends, and statistical significance using inferential and predictive methods.
309DSBA.5	Evaluating	Evaluate business decisions by interpreting dashboards, regression models, forecasts, and risk simulations.
309DSBA.6	Creating	Design and develop automated Excel-based analytical models, dashboards, and decision-support systems to address real-world

Unit 1- Data Architecture & Wrangling: Data Cleaning Lifecycle: Using Power Query to automate the importing, unpivoting, and merging of disparate datasets. Advanced Logic & Lookup: Deploying XLOOKUP, INDEX/MATCH, and nested IFS for complex data relational mapping. Dynamic Array Formulas: Utilizing FILTER, UNIQUE, and SEQUENCE to build automated, self-updating data tables. Data Validation: Implementing constraints and dropdowns to minimize human error in data entry. (8)

Unit 2- Exploratory Data Analysis (EDA) & Visualization: Statistical Summaries: Using the Analysis ToolPak for Descriptive Statistics (Mean, Variance, Skewness, Kurtosis). Advanced PivotTables: Implementing Calculated Fields, Slicers, and Timelines for multi-dimensional business analysis. Visual Storytelling: Beyond basic charts—building Waterfall charts (for budget variance), Pareto charts (for 80/20 analysis), and Box-and-Whisker plots (for outlier detection). Executive Dashboards: Designing interactive, single-page reports that track real-time KPIs. (8+2)

Unit 3- Inferential Statistics for Business Decisions: Probability & Distribution: Modeling business risks using Normal, Binomial, and Poisson distributions. Hypothesis Testing: Applying T-Tests and Z-Tests to validate A/B testing results in marketing and operations. Analysis of Variance (ANOVA): Comparing performance across multiple segments (e.g., testing if sales differ significantly across five different store formats). Confidence Intervals: Calculating margins of error for survey data and financial estimates. (8)

Unit 4- Predictive Analytics & Forecasting: Correlation Analysis: Building Correlation Matrices to identify drivers of business growth. Linear & Multiple Regression: Designing models to predict a dependent variable (e.g., Sales) based on multiple independent variables (e.g., Ad Spend, Price, Seasonality). Time Series Forecasting: Using Exponential Smoothing (ETS) and moving averages to predict future demand while accounting for seasonality. Model Validation: Interpreting R^2 , Adjusted R^2 , and p-values to ensure model accuracy. (8+2)

Unit 5- Prescriptive Analytics & Risk Modeling: Optimization with Solver: Solving for the "Best Case" in resource allocation, logistics, and portfolio management under constraints. Sensitivity Analysis: Using Data Tables and Goal Seek to determine how changes in input variables affect the bottom line. Scenario Manager: Creating and comparing "Best-Case," "Worst-Case," and "Most-Likely" business outcomes. Monte Carlo Simulations: Introduction to risk modeling by simulating thousands of iterations to determine the probability of project profitability. (8+1)

Suggested Text Books:

1. Wayne L. Winston, Microsoft Excel Data Analysis and Business Modeling
2. S. Christian Albright and Wayne L. Winston, Business Analytics: Data Analysis & Decision Making

Suggested Reference Books:

1. Paul McFedries, Excel Data Analysis For Dummies
2. Mark Harmon, Excel Master Series: Statistics for the MBA

Suggested E-Resources:

1. https://onlinecourses.nptel.ac.in/noc26_mg39/preview
2. <https://nptel.ac.in/courses/110106072>

Semester: III	R25-MBA-SEC-310DSBA	Data Visualization Lab
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Objectives:

1. Apply visual perception and design principles to create clear, ethical, and effective business visualizations.
2. Select appropriate chart types to represent categorical, comparative, temporal, relational, and geographic data.
3. Analyze datasets to identify trends, patterns, correlations, and outliers using advanced visualization techniques.
4. Design interactive dashboards that support executive decision-making and real-time data exploration.
5. Transform complex datasets into meaningful visual stories aligned with business objectives.
6. Develop professional-grade, insight-driven dashboards and visual narratives suitable for managerial and strategic use.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
310DSBA.1	Remembering	Design and apply professional-grade dashboards using advanced visualization logic.
310DSBA.2	Understanding	Explain and critique business visuals based on design principles and cognitive load.
310DSBA.3	Applying	Identify and use outliers and correlations using scatter and bubble plots.
310DSBA.4	Analyzing	Analyze Transform geographic data into heat maps for territory management.
310DSBA.5	Evaluating	Assess and Synthesize complex data into a cohesive narrative for executive decision-making.
310DSBA.6	Creating	To develop interactive dashboards and visual stories and business context to solve real-world problems.

Unit 1- Foundations of Visual Design & Data Perception: Preattentive Attributes: Using color, size, and orientation to direct executive attention. Gestalt Principles: Applying proximity, similarity, and enclosure to group business data logically. Design Ethics: Identifying and avoiding "Misleading Charts" (e.g., truncated axes, improper scaling). Lab Work: Auditing corporate annual reports to identify and fix poor visualizations. (8)

Unit 2- Comparative & Categorical Analysis: Advanced Bar & Column Charts: Creating Clustered vs. Stacked charts and Bullet graphs for target-vs-actual tracking. Part-to-Whole Analysis: Moving beyond Pie charts to Treemaps and Sunburst charts for market share analysis. The 80/20 Rule: Building dynamic Pareto Charts to identify key revenue drivers.

Lab Work: Developing a Sales Performance Report comparing regional targets vs. actuals. (8+2)

Unit 3- Time Series & Relationship Visualization: Trend Analysis: Using Area charts and Dual-axis charts to plot revenue vs. profit margins over time. Correlation Mapping: Using Scatter Plots and Bubble charts to identify relationships (e.g., Ad Spend vs. Customer Acquisition). Heatmaps & Matrix Views: Visualizing "Peak Hours" or seasonal intensity in retail/operations data. Lab Work: Creating a 5-year financial trend analysis with moving average trendlines. (8)

Unit 4- Interactive Executive Dashboards: Navigation & Interactivity: Implementing Slicers, Timeline filters, and "Drill-down" capabilities. KPI Scorecards: Designing "Traffic Light" reporting (Red-Amber-Green) for project health monitoring. Data Refresh Workflows: Linking Excel dashboards to external live data sources (Web, SQL, or CSV). Lab Work: Building a Comprehensive Marketing Dashboard that filters data by product, region, and quarter. (8+2)

Unit 5- Geospatial Analysis & Narrative Storytelling

Map Charts: Creating Filled Maps and Heat Maps to visualize geographic sales distribution. Storyboarding: Sequencing visualizations to build a logical "Narrative Flow" for a boardroom presentation. Annotation & Context: Adding data labels and dynamic (8+1)

Suggested Text Books:

1. Knaflitz, Cole Nussbaumer. Storytelling with Data: A Data Visualization Guide for Business Professionals. Wiley, 1st Edition, 2015.
2. Wexler, Steve; Shaffer, Jeffrey; & Cotgreave, Andy. The Big Book of Dashboards: Visualizing Your Data Using Real-World Business Scenarios. Wiley, 1st Edition, 2017.
3. Knight, Devin; Mitchell, Erin; & Knight, Mitchell. Microsoft Power BI Quick Start Guide: Bring your data to life through data modeling, visualization, and digital storytelling. Packt Publishing, 3rd Edition, 2022.

Suggested Reference Books:

1. Few, Stephen. Information Dashboard Design: Displaying Data for At-a-Glance Monitoring. Analytics Press, 2nd Edition, 2013.
2. Wilke, Claus O. Fundamentals of Data Visualization: A Primer on Making Informative and Compelling Figures. O'Reilly Media, 1st Edition, 2019.
3. Alexander, Michael. Excel Dashboards and Reports. Wiley (Mr. Spreadsheet's Bookshelf), 2nd Edition, 2013.

Suggested E-Resources:

1. https://onlinecourses.swayam2.ac.in/imb26_mg110/preview
2. https://onlinecourses.nptel.ac.in/noc26_mg39/preview

Semester: III	R25-MBA-SEC-311DSBA	Machine Learning
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Objectives:-

1. To establish a strong foundation in probabilistic machine learning and linear model application.
2. To equip students with methods to tackle high-dimensional, complex, and non-linear data challenges.
3. To provide expertise in modeling and analysis of structured data with conditional dependencies.
4. To familiarize students with advanced computational inference techniques and unsupervised data structuring.
5. To introduce specialized latent variable models and emerging fields.
6. To develop and implement end-to-end machine learning solutions using modern tools and frameworks such as Scikit-learn and TensorFlow for real-world data-driven applications.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
311DSBA.1	Remembering	Understand core concepts of probability, Bayesian statistics, and generative models.
311DSBA.2	Understanding	Distinguish methodologies and applications of linear, logistic, and generalized linear models.
311DSBA.3	Applying	Apply dimensionality reduction, kernel methods, and ensemble techniques for structured data analysis.
311DSBA.4	Analyzing	Analyze complex data relationships using directed and undirected graphical models.
311DSBA.5	Evaluating	Evaluate predictive models and their suitability for different types of data and real-world scenarios.
311DSBA.6	Creating	Design and implement end-to-end machine learning solutions integrating probabilistic models, dimensionality reduction, graphical models, latent variable models, and deep learning.

Unit 1- Introduction, Probability, and Generative Classification: Introduction:Machine Learning-Types: Supervised Learning and Unsupervised Learning.Probability Fundamentals: Introduction, Probability theory, Discrete Distributions, Continuous Distributions, Joint Probability Distributions, Transformations of Random Variables, Monte Carlo Approximation, and Information Theory.Generative Models for Discrete Data: Introduction, Bayesian Concept Learning, Beta-binomial model, Dirichlet-multinomial model, and Naive Bayes Classifiers.Gaussian Models: Introduction, Gaussian discriminant analysis, Inference in jointly Gaussian distributions, Linear Gaussian systems, and Inferring the parameters of an

MVN.Statistics: Bayesian Statistics (Posterior distributions, Model Selection, Priors, Hierarchical Bayes, Empirical Bayes, Decision Theory) and Frequentist Statistics (Sampling distribution, Decision theory, Empirical Risk Minimization). (8)

Unit 2- Core Supervised Learning, GLMs, and Directed Graphical Models: Linear Regression: Introduction, Model Specification, Maximum likelihood estimation (least square), Ridge Regression, and Bayesian Linear Regression. Logistic Regression: Introduction, Model Specification, Model Fitting, Bayesian Logistic Regression, Online Learning and Stochastic Optimization, and Generative vs Discriminative Classifiers. Generalized Linear Models and the Exponential Family: Introduction, The Exponential family, Generalized Linear Models (GLMs), Probit Regression, Multi-task Learning, Generalized Linear Mixed Models, and Learning to Rank. Directed Graphical Models (Bayes nets): Introduction, Naive Bayes Classifiers, Markov and hidden Markov Models (HMMs), Directed Gaussian Graphical Models, and Conditional Independence properties of DGMs. Mixture Models and the EM Algorithm: Latent variable models, Mixture Models, Parameter Estimation for Mixture Models, The EM Algorithm, Model Selection for Latent Variable Models, and Fitting models with missing data. (8+2)

Unit 3- Dimensionality Reduction, Kernels, and Ensemble Methods: Latent Linear Models (Dimensionality Reduction): Factor Analysis, Principal Components Analysis (PCA), PCA for categorical and multi-view data, and Independent Component Analysis (ICA). Sparse Linear Models: Bayesian Variable Selection, l1 regularization basics and algorithms, Non-convex regularizers, Sparse Coding, and Automatic Relevance Determination (ARD) / Sparse Bayesian Learning (SBL). Kernels: Kernel functions, Support Vector Machines (SVMs), Comparison of discriminative Kernel methods, and Kernels for building generative models. Adaptive basis function models: Classification and Regression Trees (CART), Generalized Additive Models, Boosting, Feedforward neural networks (multilayer perceptrons), and Ensemble Learning. Markov and Hidden Markov Models (HMMs): Markov models, Hidden Markov models, Inference, Learning, and Generalizations of HMMs. (8)

Unit 4- Inference Techniques and Undirected Graphical Models (MRFs): State Space Models (SSMs): Introduction, Applications of SSMs, Inference in LG-SSM, Learning for LG-SSM, Approximate online inference for non-linear, non-Gaussian SSMs, and Hybrid discrete/continuous SSMs. Undirected Graphical Models (Markov Random Fields - MRFs): Conditional Independence properties of UGMs, Parameterization of MRFs, Learning, Conditional Random Fields (CRFs), and Structural SVMs. Exact Inference: Belief Propagation for Trees, Variable elimination algorithm, and The Junction Tree Algorithm. Variational Inference: Introduction, The mean field method, Structured mean field, Variational Bayes, Variational Bayes EM, and Variational message passing (VIBES). Monte Carlo Inference (MCI) and Markov Chain Monte Carlo (MCMC): Sampling from Standard Distributions, Rejection Sampling, Importance Sampling, Particle Filtering, Gibbs Sampling, Metropolis Hastings algorithm, and Annealing methods. (8+2)

Unit 5- Clustering, Advanced Latent Variables, and Deep Learning: Clustering: Introduction, Dirichlet process mixture models, Affinity propagation, Spectral Clustering, and Hierarchical Clustering. Graphical Model Structure Learning: Structure Learning for Knowledge Discovery, Learning Tree Structures, Learning DAG Structures (and Causal DAGs), and Learning Undirected Graphical Models. Latent Variable Models for Discrete Data: Distributed state LVMs, Latent Dirichlet Allocation (LDA), Extensions of LDA, and Restricted Boltzmann machines (RBMs). Deep Learning (Introduction): Introduction, Deep Generative Models, Deep Neural Networks, and Applications of Deep Networks (8+1)

Suggested Text Books:

1. Christopher Bishop, Pattern Recognition and Machine Learning (Springer, 2007)
2. Kevin P. Murphy, Machine Learning: A Probabilistic Perspective (MIT Press, 2012)
3. Ethem Alpaydin, Introduction to Machine Learning (MIT Press, 2014)

Suggested Reference Books:

1. Aurelien Geron, Hands-On Machine Learning with Scikit-Learn and Tensor Flow (O'Reilly)
2. Andreas Muller, Introduction to Machine Learning with Python (O'Reilly)

Suggested E-Resources:

1. <https://www.kaggle.com/kanncaa1/machine-learning-tutorial-for-beginners>
2. https://www.python-course.eu/machine_learning.php12
3. <https://www.codecademy.com/learn/learn-python-3>
4. <https://www.youtube.com/watch?v=mbyG85GZ0PI&list=PLD63A284B7615313A>

SEMESTER – IV

Semester: IV	R25-MBA-PEC-401	Business Ethics & Governance
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Programme Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
401.1	Remembering	Define and explain key concepts of Business Ethics, Corporate Governance, Indian Ethos, and value-based management.
401.2	Understanding	Describe ethical theories, governance principles, and Indian models of ethical leadership in organizational context.
401.3	Applying	Apply ethical decision-making models and governance frameworks to resolve business dilemmas.
401.4	Analysing	Analyze ethical issues across functional areas of business and evaluate their impact on stakeholders.
401.5	Evaluating	Assess corporate governance practices, sustainability initiatives, and contemporary ethical challenges using critical reasoning.
401.6	Creating	Develop ethical governance strategies integrating Indian values, global standards, and ESG principles.

1. Foundations of Business Ethics and Indian Ethos: Conceptual Framework: Meaning, nature and scope of Business Ethics; Ethics vs Ethos; Moral philosophy and corporate responsibility. **Indian Ethos in Management:** Meaning, features, evolution and relevance in modern organizations; Universal Human Values; Development of human consciousness; Work Ethos and professional excellence. **Values and Corporate Culture:** Concept of values; Value system in organizations; Values of Indian managers; Trans-cultural human values; Eastern vs Western management perspectives. **Ethical Foundations for Governance:** Need for ethics in business organizations; Value-based management in the era of globalization and digital transformation. **Contemporary Dimensions:** ESG (Environmental, Social, Governance) principles; Ethics in digital and AI-driven workplaces. (9)

2. Indian Model of Management and Ethical Leadership: Concept of Indian Model of Management in socio-political context; Law of Karma and corporate accountability; Trusteeship concept. Management lessons from Indian heritage (Mahabharata, Ramayana, Bhagavad Gita); Leadership insights from Kautilya's Arthashastra. Leadership Frameworks: VEDA Model of Leadership; Corporate Rishi Model; Theory K; WE Theory (West-East Integration). Sustainable production and responsible consumption; Conscious leadership and stakeholder orientation. (7+2)

3. Business Ethics: Theories, Models and Corporate Governance: Meaning, characteristics and importance of Business Ethics; Long-term sustainability and risk mitigation. Theories of Ethics: Deontological and Teleological theories; Consequentialist and

Non-consequentialist approaches; Kohlberg's Six Stages of Moral Development. Models of Business Ethics: Svensson and Wood Model; Ethical Audit; Chris Moon's Ethical Fitness Model. Corporate Governance: Meaning and objectives; Principles of corporate governance; Role of Board of Directors; Transparency and accountability; Corporate Code of Conduct; Whistleblower policy. Ethics in digital governance, data privacy and AI ethics. **(8)**

4. Ethical Decision Making and Governance Mechanisms: Framework for Ethical Decision Making; STEP Model; PLUS Filter Model. Ethical dilemmas in functional areas: Finance (insider trading, creative accounting); Marketing (misleading ads, green washing); HRM (workplace discrimination); International Business (cross-cultural conflicts). Intellectual Property Rights and governance compliance; Ethical leadership challenges; Governance reporting standards. Cyber ethics, social media responsibility, and digital governance. **(8+2)**

5. Contemporary Ethical Issues and Global Governance: Corporate Social Responsibility (CSR); Stakeholder theory; Sustainability and climate responsibility. UN 17 Sustainable Development Goals (SDGs); ESG reporting and integrated reporting. Corporate scandals (banking frauds, airline failures, governance lapses) – Ethical analysis and governance reforms. Diversity, Equity & Inclusion (DEI); Transparency in fintech, digital platforms and e-commerce governance. **(8+1)**

Suggested Text Books

1. Aswathappa, K., Ushar Rani, J., & Gundavajhala, S. – *Business Ethics (Concept, Application, Framework and Cultural Impact)*, Himalaya Publishing House.
2. Ghosh, Biswanath – *Ethics in Management and Indian Ethos*, Vikas Publishing House.
3. Agarawal, Tushar & Chandorkar, Nidhi – *Indian Ethos of Management*, Himalaya Publication House.
4. Khandelwal – *Indian Ethos and Values for Managers*, Himalaya Publishing House.

Suggested Reference Books

1. Nandagopal, R. & Sankar, Ajith – *Indian Ethos & Values in Management*, Tata McGraw Hill.
2. Sharma, Subhas – *New Mantras in Corporate Corridors*, New Age International.
3. Velasquez – *Business Ethics: Concepts and Cases*, Pearson Education India.
4. Pillai, Radhakrishnan – *Corporate Chanakya*, Jaico Publishing House.
5. Vallance, Elizabeth – *Business Ethics at Work*, Cambridge University Press.

Research Papers / Articles Included in Curriculum

- Svensson & Wood (2008), *A Model of Business Ethics*, Journal of Business Ethics.
- Harvard Case: *Avoiding Integrity Land Mines* (Ben W. Heineman Jr.).

Semester: IV	R25-MBA-PEC-402	CSR & Sustainability
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Programme Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
402.1	Remembering	Enumerate the different concepts, legislative provisions, environmental aspects, best practices, complexity, scope, reports, social framework etc. related to CSR, business ethics & sustainability development.
402.2	Understanding	Compare different CSR theories, cases, dimensions of Sustainability and demonstrate a multi stake holder perspective in viewing CSR, Business ethics & Sustainability issues etc.
402.3	Applying	Apply the different models, theories, approaches, cases etc. for implementation & monitoring of CSR activities & Sustainability and its impact on corporate culture & society at large.
402.4	Analysing	Analyze the different reports, cases, various legal issues relating to CSR, different sustainability reports and various national and global initiatives related to CSR, Business ethics & Sustainability.
402.5	Evaluating	Evaluate the level of commitment of different organizations to CSR, Business ethics in attaining Sustainability development & show its competitive advantages.
402.6	Creating	Create & Implement a CSR policy in attaining Sustainability development and its impact on various stakeholders.

Unit 1- Corporate Social Responsibility: Fundamental Concepts, Nature and Significance of CSR. Principles of CSR: Accountability-Transparency-Sustainability. Concept of Charity, Corporate Philanthropy, Difference between Charity and Philanthropy, CSR as a key to business success. CSR as a Marketing and Branding tool for the businesses, Strategic advantage of CSR, Corporate Citizenship, and Sustainable Business. Other main aspects: CSR and Corporate Governance, Environmental Aspects of CSR. Evolution and Implementation of CSR in India. Best Global Practices of CSR, principles and CSR. CSR Projects: Conducting CSR activity by involving students at Institute level. (8)

Unit 2- CSR Legislations in India: Section 135 of Companies Act 2013. Scope of CSR, Activities under schedule VII, Leadership and CSR. Identifying the key Stakeholders of CSR, CSR & Triple Bottom Line- 3 aspects (Economic, Social, and Environmental). Role of Public sector, Non Profit Organizations and Local self-Governments in implementation of CSR projects. CSR and Business Ethics, Effect of Globalization on CSR, CSR Funds-

Criteria & Policies with legal framework. Case studies: Major CSR Initiatives. Project Work: Interview of CSR head of any Organization.(8+2)

Unit 3 Introduction to Sustainability & Sustainable Development: Definition & Concept of Sustainability & Sustainable development, need, importance, education, Philosophical development, Gandhian Thought on Sustainable Development, Sustainable Development and social framework, equitable distribution, difference between sustainable development and green development, Reducing socio- environmental costs and risks: managing the downside, driving revenues and creating intangible value: managing the upside. Case Study – Bhutan Case for Inclusive Growth on Environment protection and Reducing carbon footprints, IKEA Company & Sustainability (8)

Unit 4- Dimensions of Sustainable Development: (a) Environmental: Natural Resources & Resource Depletion, Management of human energy consumption, Solid waste generation & waste management, Global Greenhouse emission, Air & Water Pollution and Climate Change, Ozone Hole NASA report. Understanding ecological "footprint": Eco-tracking, carbon marketing, carbon credits, economics of sustainability, Designing for the environment and 'greening' the supply chain, regulation. (b) Economic: Achieving economic growth with minimal Environmental degradation, Nature as an economic externality, economic opportunity, introduction & implementation of inclusive growth models for rural development, Sustainable livelihoods for tribal communities. (c) Social: Peace, Security, achieving the UN sustainable development goals by performing well in Social & economic issues (8+2)

Unit 5- Sustainable Development & Business Ethics: Sustainability reporting: Triple bottom line reports - The content of sustainability reports (also CSR reports, ESG reports, social and environmental reports) Social accountability standard - ISO 26000: Social responsibility guidance standard, Global Compact Principles, Environmental Impact Assessment, Life Cycle Analysis, Social Impact Assessment. Indian Values and Ethics: Respect for Elders, Hierarchy and Status, Need for Security, Non – Violence, Cooperation, Simple Living high Thinking, Rights and Duties, Ethics in Work life, Holistic relationship between Man and Nature, Attitudes and Beliefs. Project: Student to study the Covid-19/ any other current crisis.(8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

- 1.CSR & Sustainability by Michael Hopkins
- 2.Corporate Social Responsibility by David Crowther and Guler Aras
3. Corporate Social Responsibility in India by Sanjay K Agarwal
4. Triple Bottom Line Reporting and Corporate Sustainability by S Singh, PHI – Eastern Economy Edition.
5. Ethics, Business & Society Edited by Ananda Das Gupta, Response Books
6. Business Ethics by Crane and Matten, Oxford University Press, 2nd Edition.

7. Business Ethics – An Indian Perspective, by Ronald Francis and Mukti Mishra, TMGH.

Suggested Reference Books:

1. Corporate Social Responsibility in India, Cases and Developments after the legal Mandate, Nayana Mitra and Rene Schmidpeter
2. CSR Strategies-for a competitive edge in emerging markets by Sri Urip
3. The Sustainable Enterprise –Profiting from best practice by Simmons and Simmons, Kogan Page,2nd Edition.
4. Business Ethics – Text and Cases by CSV Murthy, Himalaya Publications, 2nd Revised Edition.
5. Case Studies on Ethics and Corporate Governance Vol I and II, ICFAI Books
6. Target 3 Billion- Innovative Solutions Towards Sustainable Development , A.P.J. Abdul Kalam, Srijan Pal Singh

Suggested e-resources:

www.india.gov.in

<https://www.un.org>

Semester: IV	R25-MBA-PEC-403	Current Trends in Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Programme Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
403.1	Remembering	Define key concepts related to contemporary management trends.
403.2	Understanding	Explain the impact of technology, sustainability, and globalization on business.
403.3	Applying	Apply modern managerial tools like Agile, Design Thinking, and ESG frameworks.
403.4	Analysing	Analyze business case studies related to innovation and digital transformation.
403.5	Evaluating	Evaluate strategic and financial innovations in global business.
403.6	Creating	Develop strategic solutions using emerging management approaches.

Unit 01: Digital Transformation & Technology-Driven Management: Concept of Digital Transformation: Meaning and significance, Digital maturity models, Impact on traditional business structures, Emerging Technologies in Management: Artificial Intelligence & Machine Learning, Big Data & Predictive Analytics, Internet of Things (IoT), Cloud Computing & Automation, Block chain basics, Industry 4.0 & Smart Organizations, Cyber-physical systems, Automation in manufacturing & services, Digital supply chains, Digital Leadership & Cyber security: Role of leadership in digital change, Managing digital workforce, Cyber risk managements. **(8)**

Unit 02: Sustainable & Responsible Management: ESG Framework: Environmental, Social, Governance dimensions, ESG reporting standards, Impact on investor decisions, Corporate Social Responsibility (CSR): CSR evolution in India, Strategic CSR, CSR compliance & governance, Triple Bottom Line, People, Planet, Profit approach, Stakeholder theory, Green & Circular Economy: Sustainable production systems, Waste management & recycling, Sustainable supply chain, Ethical Leadership & Corporate Governance, Ethical decision-making, Transparency & accountability. **(8+2)**

Unit 03: Innovation, Agility & Entrepreneurship: Agile Management: Agile principles, Scrum & Kanban overview, Agile vs Traditional project management, Design Thinking: Empathy, Define, Ideate, Prototype, Test, Human-centered innovation, Lean Management: Lean principles, Waste elimination, Continuous improvement (Kaizen), Disruptive Innovation: Concept & characteristics, Platform-based businesses, Start-up Ecosystem: Venture capital & angel funding, Incubators & accelerators, Entrepreneurial challenges. **(8)**

Unit 04: Globalization & Contemporary HR Trends: Global Business Environment: Global trade dynamics, Geopolitical risk, Cross-Cultural Management: Cultural dimensions theory, Managing multicultural teams, Diversity, Equity & Inclusion (DEI): Inclusive

workplace practices, Gender & workforce participation, Future of Work: Remote & Hybrid models, Gig economy, Work-life integration, Talent Analytics & Reskilling: HR analytics tools, AI in recruitment, Continuous learning & up skilling. **(8+2)**

Unit 05: Strategic & Financial Innovations: FinTech Innovations: Digital payments, Peer-to-peer lending, Robo-advisory services, Platform Economy: Multi-sided platforms, Network effects, Strategic Alliances & Mergers: Joint ventures, Cross-border M&A, Crisis & Risk Management: Business continuity planning, Risk mitigation strategies, Future Leadership Trends: Emotional Intelligence, Transformational leadership, Data-driven decision making. **(8+1)**

Suggested Text Books

1. Management: Text & Cases – Dr. C.B. Gupta
2. Business Environment: Text and Cases – K. Aswathappa
3. Strategic Management: Concepts and Cases – R. Srinivasan & D.K. Srivastava
4. Emerging Trends in Management Practices – Indian academic compilation (multiple authors)
5. Innovation and Entrepreneurship – Peter F. Drucker (*commonly referenced in Indian management studies*)

Suggested Reference Books

1. Digital Transformation & Global Society: Challenges & Opportunities – Edited volume with Indian cases.
2. Corporate Governance and Social Responsibility – Biswanath Ghosh / S.K. Aggarwal (India focus).
3. Human Resource Management in Practice – D. Prasad & P. Prasad.
4. Business Analytics: The Science of Data-Driven Decision Making – U.S. Pandey / R. Sharma.
5. Entrepreneurship Development: Small Business Enterprise – Poornima M. Charantimath,
6. Managing Indian Organizations – Indian case anthology.
7. Global Business Management – R. Ramamurti

Semester: IV	R25-MBA-PEC-404	Enterprise Performance Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Program Elective Course

Course Objectives (COs):

1. Understand the concepts, frameworks, and tools of Enterprise Performance Management for measuring and managing organizational performance.
2. Analyze financial and non-financial performance metrics to support strategic and operational decision-making.
3. Apply performance management systems to improve efficiency, effectiveness, and value creation across the enterprise.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
404.1	Remembering	Enumerate the different parameters & facets of management control of an enterprise.
404.2	Understanding	Explain the role of Enterprise Performance Management in strategy execution and organizational control.
404.3	Applying	Apply the various techniques of enterprise performance management for varied sectors
404.4	Analysing	Analyse the key financial & non-financial attributes to evaluate enterprise performance
404.5	Evaluating	Evaluate organizational performance using integrated financial and non-financial indicators.
404.6	Creating	Formulate a basic Enterprise Performance Management system aligned with organizational strategy.

Unit 1- Introduction to EPM: Concept and evolution of EPM, Management control systems, Role of EPM in strategic management and organizational control, Traditional vs modern performance management systems, Stakeholder theory and performance expectations, Responsibility Centers and its types, Challenges in measuring enterprise performance, Ethical considerations in performance measurement (8)

Unit 2- Performance Evaluation Parameters: Financial- ROI, ROA, ROE, MVA, EVA, Profit margin, EPS, PE ratio, Cost per unit. **Non-financial-** Balanced Scorecard, Malcom Baldrige framework, Performance Prism, Concept of transfer pricing and its types. (8+2)

Unit 3- Performance Evaluation Parameters for Banks, Retail & Project:

Banks - Customer Base, NPAs, Deposits, ROI, Financial Inclusion, Spread, Credit Appraisal, Investments. (Discuss case study of one bank)

Retail: ABC analysis, Sell Through Analysis, Multiple Attribute Method, Area & Employee related performance.

Project: Schedule variance (time overruns), Project Cost Variance (cost overruns). (8)

Unit 4- Performance Evaluation Parameters for E-Commerce: Features of E commerce, Need of evaluation, Metrics for performance evaluation: Business metrics, Traffic metrics, Conversion matrix & Audience involvement metrics.

KPI used by E Commerce industry: Website traffic, referral traffic, conversion rate optimization, bounce rate of website, repeat visit, cart abandon rate, cost per conversion, average order value, revenue on advertising spend, customer life time value, net promoter score, churn rate (8+2)

Unit 5- Audit Function: Meaning, Role of audit in Performance management, Financial Audit, Internal Audit, Cost Audit, Management Audit, HR Audit, Operations Audit, Audit Reports & Types. (Discuss sample audit report) (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. Management Control System by Robert Anthony & Vijay Govindrajn, Tata McGraw Hill Publishing Co. Ltd.
2. Management Control in Non-Profit Organizations by Robert Anthony & David Young, McGraw Hill International Publication
3. Retailing Management by Swapna Pradhan, TMGH

Suggested Reference Books:

1. Project Management by K. Nagarajan, New Age International Publications
2. Principles and Practices of Auditing by Ravindar Kumar & Virendar Sharma, PHI.
3. Principles and Practices of Banking by Indian Institute of Banking & Finance, MacMillan India Ltd.
4. Financial Management by Prasanna Chandra, TMGH
5. E business: A Canadian perspective for a Networked World, Gerald Trites, J. Efrim Boritz Pearson

Suggested e-resources:

1. www.baldrigefoundation.org
2. <https://hbr.org/1992/01/the-balanced-scorecard-measures-that-drive-performance>
3. <https://project-management.info/performance-prism/>
4. <https://www.netsuite.com/portal/resource/articles/ecommerce/ecommerce-metrics.shtml>

Semester: IV	R25-MBA-PRJ-405	Masters Project
Credits: 6	Total Marks: 100 (50 FA + 50 SA)	Project - compulsory

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
405.1	Remembering	Identify and define contemporary managerial, business, economic, or social problems through systematic research inquiry.
405.2	Understanding	Understand contemporary managerial, business, economic, or social problems
405.3	Applying	Apply appropriate management theories, analytical tools, and research methodologies to investigate real-world business issues.
405.4	Analysing	Collect, organize, analyze, and interpret primary and/or secondary data using suitable qualitative and quantitative techniques.
405.5	Evaluating	Evaluate trends, consumer behavior, policy implications, and emerging business practices from a managerial perspective.
405.6	Creating	Prepare and present a professional research report demonstrating effective communication, academic writing, analytical thinking, and ethical research practices.

Introduction:

The project aims to provide students with an opportunity to apply conceptual knowledge, analytical skills, research methodology, and specialization-specific understanding to real-world managerial problems, industry trends, consumer behavior, policy issues, or emerging business practices.

Since the project is not associated with any company, students shall undertake an independent academic research study based on primary and/or secondary data.

Learning Objectives

1. Develop research orientation and analytical thinking.
2. Apply management concepts and tools in practical situations.
3. Understand contemporary business and economic issues.
4. Enhance problem-solving and decision-making skills.
5. Improve report writing and presentation abilities.

Nature of the Project-

1. The project must be related to the student's specialization.
2. The study may be Exploratory, Descriptive, Analytical, Comparative, Survey-based, Conceptual with empirical support
3. Students may use Primary Data (questionnaire, interviews, surveys, observations) and/or Secondary Data (reports, journals, websites, government publications, databases, articles)

4. Purely theoretical projects without analysis should be avoided.

Research Proposal Submission-

Students must submit a Proposal (in 2-4 pages) before commencing the project containing:

- Title of the Project
- Introduction
- Objectives
- Research Methodology
- Expected Outcomes
- Tentative Chapter Scheme
- Project Timeline

Contents of Masters report-

The report must reflect the work done and justify the same. The report should be well documented and supported by –

1. Title/Cover page
2. College Certificate
3. Declaration by student
4. Acknowledgment by student
5. Executive Summary/ Abstract
6. Index
7. Chapterisation scheme-

Introduction (Need for the Study, Objectives of the Study, Scope, Limitations, Research Questions / Hypotheses (if applicable), etc.)

Review of Literature (Theoretical Framework, Previous Research Studies, Theoretical Models / Approaches Relevant to the Study)

Research Methodology (Research process, Research Design, Nature of the Study, Sampling plan, Data types and data collection tools, Data analysis techniques, etc..)

Data Analysis and Interpretation (Qualitative and /or Quantitative based on survey data, case studies, observation sheets, Interviews, reports, task work, etc. Use of charts, graphs, tables, etc. required)

Findings, Suggestions and Conclusion (Qualitative and /or Quantitative)

8. Learning from the project by the student
9. References (Books/ Journals/ Websites/ Reports)
10. Annexure/ Appendix (if any) like Questionnaire/ Schedules/ Interview transcripts/ Reports/ Observation sheet/ Financial statement/ Any supporting material

Submission of Masters Project-

In Semester IV the student shall work under the supervision of the faculty and carry out a Masters Project and submit a structured report in TWO hard bound copies (Blackbook) & one soft copy (PDF). The student is required to conduct advanced research on a topic related to one (or more) of contemporary issues in management. The topic is chosen in consultation with the student's supervisor.

The student must submit the completed Research Project and make a presentation of the same. The completion of the Masters Project shall be certified by the Faculty Supervisor and approved by HOD.

Evaluation Pattern:

Total Marks: 100 (50 FA+ 50 SA)

Formative Assessment: 50 Marks

- 1) Presentation - 20 Marks
- 2) Internal Viva-Voce- 30 Marks

Summative Assessment: 50 Marks

- 1) Presentation - 20 Marks
- 2) Internal Viva-Voce- 30 Marks

Marketing Management Specialization (Semester-IV)

Semester -IV	R25-MBA-SCC-406MKT	Marketing Strategy
3 Credits	Total Marks: 100 (50FA+50SA)	Special Core Course- Compulsory

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
406MKT.1	Remembering	DESCRIBE various concepts of marketing strategies.
406MKT.2	Understanding	EXPLAIN various marketing strategies to handle marketing circumstances
406MKT.3	Applying	APPLY the concepts of marketing strategy to solve real-life business problems.
406MKT.4	Analysing	DISCOVER the suitable competitive advantage useful to design market specific and organization specific marketing strategies.
406MKT.5	Evaluating	ESTIMATE the attractiveness of segment to decide targeting strategy and MONITOR marketing performance using marketing matrices.
406MKT.6	Creating	DESIGN marketing strategies to lead the organization towards sustainable growth.

UNIT 1. Introduction to Marketing Strategy: Introduction to Marketing Strategy: Meaning and Definition of Marketing Strategy, the Role of Marketing strategy in Business, The Evolution of Marketing Strategy. The Marketing Strategy Process: Steps in Developing a Marketing Strategy: Environmental Analysis, Setting Marketing Objectives, Identifying Target Markets, Crafting the Marketing Mix (4Ps), Implementing and Monitoring the Strategy. Business Strategy and Marketing Strategy Alignment: Corporate and Business-Level Strategies. Marketing Strategies along various stages of PLC, Integrating Marketing Strategy with Overall Business Goals, Case Studies of Successful Strategic Alignment. (8)

UNIT 2. Marketing for Customer Advantage & Value Creation: Definition and Importance: Defining customer value and its significance in marketing and business strategy. Generating and using customer insight to drive strategy, tools for innovating new values for customers, managing customers for experience, managing customers for profit. Customer Value vs. Satisfaction & Loyalty: Difference between customer value, satisfaction, and loyalty. Measuring Customer Value: Exploring qualitative and quantitative methods for measuring customer value. Strategies for innovating new values for customers: proactive, active, reactive and passive. Targeting customers, Cognitive marketing strategy. (8+2)

Unit 3. Pricing – The Ultimate Marketing Strategy: Pricing Excellence, Strategic Pricing [4 C's of Pricing - customer, costs, competition, and constraints], Pricing Maturity Model, Transformational Model. Centralized Versus Decentralized Pricing Options for Pricing Organizational Designs, Pricing Capabilities: Pricing Dimensions, Pricing Myths at the

Organizational Level. Recent Trends in Pricing (AI & Gen AI, Volatility, Dynamic Pricing, Sustainability, Fairness), competing against low-cost rivals, Pricing during recession. (8)

UNIT 4. Vibrant Scope of Marketing Strategy: Account Based Marketing, Data-Driven Marketing Strategy, Digital Marketing Strategies, Relationship Marketing Strategies, Distribution Strategy, Experiential Marketing, Innovation Marketing, Green Marketing, Retail Marketing Inbound Marketing Strategies – Online Marketing and Offline Marketing, Multilevel Marketing, Strategic marketing in new modern era, Market-Innovation strategy: Pioneering New Markets (type), Customer Centric Approach, Strategy Innovation, Brand Storytelling, Strategy Sustainability and Ethics, Strategy Community engagement Strategies in international markets, emerging and declining markets. (8+2)

UNIT 5. Executing Marketing Plan: Formulation, reformulation of marketing strategies, the control process. Implementing and Evaluating Marketing Strategies: Key Performance Indicators (KPIs) and Metrics, Sustainable competitive marketing advantages, Monitoring and Adjusting Marketing Strategies, Real-World Examples of Marketing Strategy Execution. Preparing marketing plan for Ed-tech, Automobile, Banking & Insurance, FMCG, and Food & Beverage. Presenting Marketing Plan, Marketing decision making with reasons, Marketing Strategies to compete globally & matching Recent Trends. (8+1)

Suggested Text Books:

1. Strategic Marketing by A. Nag, Macmillan Publication
2. The Pricing Journey: The Organizational Transformation Toward Pricing Excellence, Stephan M. Liozu, 2015
3. Marketing Strategy by Walker, Mullins, Boyd & Larreche, McGraw-Hill/Irwin
4. Marketing Strategy and Competitive Positioning by Graham Hooley, Brigitte Nicoulaud, Education, 5th Edition.
5. Strategic Marketing Management-Richard Wilson & Colin Gilligan, Routledge
6. Strategic Marketing: An Introduction by Tony Proctor

Suggested Reference Books:

1. Strategic Marketing David. W. Cravens, Nigel. F. Piercy, Tata MacGraw Hill Publication
2. Marketing Strategy: A Decision-Focused Approach-John W. Mullins, By Felix Mavondo.
3. Strategic Marketing Text & Cases-S. Shajahan, Viva Books
4. Strategic Management & Marketing by Narendra Singh, Himalaya Publication
5. Strategic Marketing Management- Text & Cases by UC Mathur, Macmillan

R-resources:

1. <https://www.youtube.com/watch?v=Fy1pcW9mvNo>
2. <https://www.youtube.com/watch?v=RCHofmkLgzs>
3. https://www.youtube.com/watch?v=jF_MDRMFcPs
4. <https://www.youtube.com/watch?v=cZom3AAOsgs>

Semester: IV	R25-MBA-SEC-407MKT	Sales and Distribution Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
407MKT.1	Remembering	Recall key concepts, terminology, and theories of sales management and distribution systems.
407MKT.2	Understanding	Explain the concepts and functions of sales and distribution management
407MKT.3	Applying	Apply modern sales analytics and CRM tools in sales management.
407MKT.4	Analysing	Analyze the performance of distribution channels level by evaluating factors like cost efficiency, reach, and customer satisfaction to determine the best channel strategies for a company
407MKT.5	Evaluating	Assess the effectiveness of sales and distribution strategies and provide recommendations for improvement.
407MKT.6	Creating	Design innovative sales and distribution strategies to optimize sales performance and distribution network efficiency.

Unit 1- Introduction to Sales Management: Overview of Sales and Distribution Management, importance, and role in marketing, Evolution, Objectives and functions of sales management, Emerging trends in Sales Management, Sales Management Concepts, Impact of Technology on Sales: ERP, Social Platforms, Introduction of Sales Force Automation Systems (SFA) and Mobile technology in sales. Sales Process and Techniques: Sales planning, strategy development, Types of selling: B2B, B2C, B2G consultative, relationship selling. Sales forecasting and budgeting, Sales target setting and performance evaluation, Sales territories and quotas, Skills required for Sales Managers, Careers in Sales Management, Ethical and Legal Aspects in Sales (9)

Unit 2- Sales Force Management: Objectives & Structures of Sales Organization, Recruitment, selection, training the sales force, motivation to sales force, Compensation and Evaluation of Sales Force, Personal Selling Process, Relationship selling, Sales Planning and Control, Sales Forecasting & Budgeting, Sales Quotas and Targets, Primary and Secondary Sales, Monthly Sales Plan, Territory Sales and Coverage Plan, Sales Call Report, Expired Goods and Breakage Return Report, Order Booking Report, Fortnightly, Monthly and Quarterly Sales Report, Sales Audit, Sales Force Productivity Indicators Territory Productivity, per Person per Month Productivity, Sales to Marketing Expenses Ratio. (9+2)

Unit 3- Distribution Channels and Logistics Management: Types of distribution channels, direct and indirect, Role and functions of intermediaries in distribution channels, Designing and Managing Distribution Channels, Factors influencing channel design decisions, Channel structure and management strategies, Type of channels available for B2B, B2C, General Trade, Modern trade Institutional Trade, Channel Members, Concept of VMS and HMS, Conflict resolution and collaboration in channels, Logistics Management and Supply Chain, Basics of logistics and its role in distribution, Inventory management, warehousing, and transportation. (7)

Unit 4- Channel Strategy and Performance: Evaluating Distribution Channel Performance, Criteria for assessing channel effectiveness (coverage, cost, customer satisfaction), Channel performance analysis and corrective actions, Channel Strategy and Market Coverage, Intensive, selective, and exclusive distribution strategies, Integrated Distribution Systems, Omni-channel distribution strategies, Hybrid & Multi-channel distribution, E-commerce and digital distribution channels, Franchising Retailing and Wholesaling in Distribution, Types & Role of retailers and wholesalers in the distribution chain, Retailing strategies and innovations in distribution. (7+2)

Unit 5- Recent trends in Sales and Distribution Management (SDM): Sales and Distribution in a Digital Age, Impact of technology and digital tools on sales and distribution, Role of Customer Relationship Management systems, Automation in sales processes, AI, Chatbots, Virtual Assistants & data analytics, Smart Distribution Centers, Demand Forecasting via Smart Shelves & Personalized Marketing, Global & International SDM, Managing international sales teams and global distribution channels, Ethical and Legal issues in Sales and Distribution, Emerging trends such as sustainable distribution practices, Integration of advanced technologies, data analytics is transforming sales processes. (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. Sales and Distribution Management, Havaladar & Cavale, TMGH
2. Sales Management, Still, Cundiff & Govani, Sandeep Puri Pearson Education
3. Sales and Distribution Management, SL Gupta, Excel books
4. Fundamentals of Selling, 12th Ed, Charles Futrell, McGraw Hill Irwin
5. Retail Marketing, Swapna Pradhan TMGH
6. Retailing Management, Michael Levy & Barton Weitz, TMGH

Suggested Reference Books:

1. Sales and Distribution Management, Tapan K Panda, Sunil Sahadev, Oxford Higher education.
2. Sales and Distribution Management, A Nag, McGraw Hill Publication
3. Management of Sales Force-Rosann Spiro, William Stanton, Gregory Rich; TMGH
4. Retail Management, Dr. Vishal Gaikwad, Dr. Prashant Kotasthane, AGPH Books
5. Retail Management, Bajaj, Tuli, Shrivastava, Oxford

Semester: IV	R25-MBA-SEC-408MKT	Marketing Analytics
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. Understand fundamental concepts, scope, and significance of marketing analytics in data-driven decision-making.
2. Identify and interpret different types of marketing data, metrics, and KPIs across customers, products, and channels.
3. Apply analytical tools and techniques to solve marketing problems using structured and unstructured data.
4. Analyze customer, product, and campaign data to derive actionable insights for marketing strategies.
5. Evaluate marketing performance using appropriate models, metrics, and measurement frameworks.
6. Design analytics-driven marketing strategies, dashboards, and reports leveraging predictive analytics, AI, and emerging tools.

Course Outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
408MKT.1	Remembering	Recall key concepts, tools, and techniques in Marketing Analytics.
408MKT.2	Understanding	Explain the role of data, metrics, and analytics in marketing decision-making.
408MKT.3	Applying	Apply analytical tools and techniques to solve marketing problems using data.
408MKT.4	Analysing	Analyze customer, product, and campaign data to derive meaningful insights.
408MKT.5	Evaluating	Evaluate marketing performance using appropriate analytical models and metrics.
408MKT.6	Creating	Design analytics-driven marketing strategies, dashboards, and reports.

Unit 1- Introduction to Marketing Analytics:

Meaning, scope, and importance of Marketing Analytics; Data-driven marketing; Types of marketing data (structured and unstructured); Sources of data – primary, secondary, digital and third-party data; Role of analytics in marketing decision-making; Descriptive, predictive and prescriptive analytics; Ethical issues in data usage, privacy and data protection. (8)

Unit 2- Data, Metrics and Measurement:

Marketing metrics and KPIs; Customer metrics – CAC, CLV, retention, churn; Channel metrics – reach, impressions, CTR, CPC, CPA, ROAS, ROI; Product and pricing metrics;

Data quality, data cleaning, and data visualization basics; Introduction to spreadsheets for marketing analysis. (8+2)

Unit 3- Customer Analytics:

Customer segmentation and profiling; RFM analysis; Customer journey analytics; Funnel analysis (TOFU, MOFU, BOFU); Cohort analysis; Attribution models; Understanding customer behavior using data; Predicting customer churn and retention. (9)

Unit 4- Campaign and Performance Analytics:

Campaign planning and measurement; A/B testing and experimentation; Conversion optimization; Marketing mix modeling; Multi-channel and omni-channel analytics; Budget allocation using analytics; Dashboarding and reporting for marketing performance. (6+2)

Unit 5- Advanced and Emerging Analytics:

Predictive analytics in marketing; AI and machine learning applications in marketing; Recommendation systems; Marketing automation analytics; Social media analytics; Web analytics tools (Google Analytics overview); Future trends in Marketing Analytics. (9+1)

Suggested Text Books:

1. Kaushik, A. (2010). Web Analytics 2.0. Sybex.
2. Chaffey, D., & Ellis-Chadwick, F. (2019). Digital Marketing: Strategy, Implementation and Practice (7th ed.). Pearson Education.
3. Lilien, G. L., Rangaswamy, A., & De Bruyn, P. (2017). Marketing Engineering. DecisionPro.
4. Winston, W. L. (2014). Marketing Analytics: Data-Driven Techniques with Microsoft Excel. Wiley.

Suggested Reference Books:

1. Davenport, T. H., & Harris, J. (2017). Competing on Analytics. Harvard Business Review Press.
2. Wedel, M., & Kannan, P. K. (2016). Marketing Analytics for Data-Rich Environments. Springer.

Suggested e-resources:

1. <https://analytics.google.com>
2. <https://www.tableau.com>
3. <https://www.ibm.com/analytics>

Semester: III	R25-MBA-SEC-409MKT	International Marketing
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
409MKT.1	Remembering	Recall various terms and key concepts associated with international marketing.
409MKT.2	Understanding	Explain the concepts, scope, and importance of international marketing.
409MKT.3	Applying	Design appropriate product, pricing, promotion, and distribution strategies for international markets.
409MKT.4	Analysing	Assess the impact of cultural, social, and economic differences on international consumer behavior and buying decisions.
409MKT.5	Evaluating	Critically evaluate global branding, digital marketing, sustainability, ethics, and emerging trends in international markets.
409MKT.6	Creating	Prepare a comprehensive international marketing plan including market selection, segmentation, targeting, positioning, and risk management strategies.

Unit 1- Introduction to International Marketing: Concept and Scope of International Marketing, Internationalization process, EPRG Framework (Ethnocentric, Polycentric, Regiocentric, Geocentric), Globalization and Trade, Globalization drivers, , Regional trade blocs, International Marketing Research, Global information systems, Challenges in cross-country research (7)

Unit 2- International Marketing Environment: Economic Environment- Levels of economic development, Market potential analysis, Economic indicators. Political and Legal Environment- Political risk assessment, Trade barriers, Role of International Monetary Fund, Role of World Bank, Role of WTO. Cultural and Social Environment- Elements of culture, High-context vs Low-context cultures, Cross-cultural communication challenges. (8+2)

Unit 3- International Market Entry Strategies: Exporting Strategies- Direct vs Indirect exporting, Export documentation and procedures (Indian context), Role of Export Promotion Councils. Contractual Entry Modes- Licensing, Franchising, Contract Manufacturing. Investment Entry Modes- Joint Ventures, Strategic Alliances, Wholly Owned Subsidiaries, Mergers & Acquisitions. Market Selection & Segmentation- International market screening, Global STP (Segmentation, Targeting, Positioning) (8)

Unit 4- International Marketing Mix Strategies: International Product Strategy- Standardization vs Adaptation, Global product life cycle, Branding decisions in global markets. International Pricing Strategy- Pricing objectives, Transfer pricing, Dumping, Countertrade, Currency fluctuations and pricing. International Distribution Strategy- Channel design in global markets, Logistics and Supply Chain, Role of intermediaries. International Promotion Strategy- Global advertising vs Local advertising, Media selection, Digital and Social Media in global marketing, International Public Relations (9+2)

Unit 5- Emerging Trends and Contemporary Issues: Digital Global Marketing, Cross-border e-commerce, Global digital platforms, AI in international marketing, International Services Marketing, Globalization of services, Offshoring & Outsourcing, Service quality challenges, Ethics and Sustainability, Ethical issues in international marketing, Corporate Social Responsibility, Green marketing in global markets, Indian Companies in Global Markets (Case Studies) (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. Global Marketing Management by Keegan Warren J. and Green M.C. Pearson Education.
2. International Marketing: Analysis and Strategy by SakOnkvisit and John Shaw, Prentice Hall of India.
3. International Marketing by Cateora, Graham and Salwan, McGraw-Hill.
4. International Marketing Management by Subhash Jain, CBS Publishers & Distributors.
5. International Marketing by Rakesh Mohan Joshi, Oxford University Press.
6. International Marketing by Rajgopal, Vikas Publishing House.
7. International Marketing- Text and Cases by Francis Cherunilam, Himalaya Publishing House

Suggested Reference Books:

1. International Marketing by Czinkota and Ronkainen, Cengage Learning.
2. Global Marketing Management by Kotabe and Helsen, Wiley Publication.
3. International Marketing by Terpstra Vern and Sarathy Ravi, The Dryden Press.
4. Global Marketing by Svend Hollensen, Prentice Hall.
5. International Marketing: An Indian Perspective by Varshney R. L. and Bhattacharya B., Sultan Chand and Sons.
6. International Marketing by PK Vasudeva, Excel Books

Semester: III	R25-MBA-SEC-410MKT	Marketing 6.0
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
410MKT.1	Remembering	Recall the key concepts in Marketing 6.0.
410MKT.2	Understanding	Explain the evolution and key concepts of Marketing 6.0.
410MKT.3	Applying	Apply digital technologies and AI tools for marketing decision making
410MKT.4	Analysing	Analyze digital consumer behavior and customer experience management.
410MKT.5	Evaluating	Evaluate ethical and social implications of AI-driven marketing.
410MKT.6	Creating	Design innovative marketing strategies using emerging technologies.

Unit 1- Evolution Towards Marketing 6.0: Marketing 1.0 to 5.0 to 6.0, Characteristics of Marketing 6.0, Human-centric and technology-driven marketing, Digital transformation in marketing, Role of data and technology in modern marketing, Changing consumer expectations in the digital era, Case studies of technology-enabled marketing (8)

Unit 2- Artificial Intelligence and Data-Driven Marketing: Role of Artificial Intelligence in marketing, Machine learning and predictive analytics in marketing decisions, Big Data and customer insights, Marketing automation tools, AI-based recommendation systems, Chatbots and virtual assistants in customer engagement, AI applications in pricing, promotion, and personalization (8+2)

Unit 3- Customer Experience and Omnichannel Marketing: Customer journey mapping in the digital era, Omnichannel marketing strategies, Customer experience management (CEM), Personalization and hyper-personalization, Digital customer engagement platforms, Social media marketing and influencer marketing, Customer relationship management (CRM) systems (8)

Unit 4- Immersive and Emerging Technologies in Marketing: Augmented Reality (AR) and Virtual Reality (VR) in marketing, Metaverse marketing and virtual marketplaces, Internet of Things (IoT) in marketing strategies, Blockchain in marketing and advertising transparency, Voice search and conversational marketing, Smart devices and connected consumer ecosystems, Future marketing technologies and innovations (8+2)

Unit 5- Trends & Issues in Marketing 6.0: Ethical issues in AI-driven marketing, Data privacy and consumer protection, Responsible use of technology in marketing, Sustainable

and socially responsible marketing, Regulation of digital platforms and marketing practices, Challenges and risks of advanced marketing technologies, Future trends and strategic implications of Marketing 6.0 (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. Marketing 6.0 – The Future is Immersive, Philip Kotler, Hermawan Kartajaya, Iwan Setiawan, Wiley (2024)
2. The Metaverse Marketing Book, Kaden Nathaniel (2022)
3. Elevate Your Brand with Immersive Experiences, Mayank Verma, Notion Press (2023)
4. Sensory Marketing, Bertil Hultén et al., Palgrave Macmillan (2009)
5. Geomarketing: Methods and Strategies, Gerard Cliquet, Wiley-ISTE (2006)

Suggested Reference Books:

1. Marketing and Sales in the Metaverse, Andreas Kohne & Ralf H. Komor, Springer (2024)
2. The Business of the Metaverse, Hemachandran K., Routledge (2024)
3. Sensory Marketing in Retail, Lindblom, Palgrave Macmillan (2023)
4. Meta Marketing Mastery, Arjun Thakur, Amazon Kindle (2024)
5. Marketing 4.0: Moving from Traditional to Digital, Philip Kotler et al., Wiley
6. HBR and McKinsey Insights on Immersive Marketing, Spatial UX, Blockchain Marketing (2023–24)

Semester: IV	R25-MBA-SEC-411MKT	Digital Marketing
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. Understand core concepts, evolution, and ecosystem of digital marketing.
2. Identify and differentiate key digital platforms, tools, and channels.
3. Analyze digital consumer behavior, web analytics, and campaign performance.
4. Apply digital marketing techniques for planning and executing campaigns.
5. Evaluate strategy effectiveness and ROI of digital marketing initiatives.
6. Design integrated digital marketing plans, content strategies, and dashboards using emerging trends

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
411MKT.1	Remembering	Recall key concepts, tools, and platforms in Digital Marketing.
411MKT.2	Understanding	Explain the role of digital channels in integrated marketing communication and customer engagement.
411MKT.3	Applying	Apply digital marketing tools and techniques for planning and executing online campaigns.
411MKT.4	Analysing	Analyze digital consumer behavior, web analytics, and campaign performance metrics.
411MKT.5	Evaluating	Evaluate digital marketing strategies and their effectiveness in achieving business objectives.
411MKT.6	Creating	Design digital marketing plans, content strategies, and performance dashboards.

Unit 1- Introduction to Digital Marketing: Meaning and scope of digital marketing, evolution of digital marketing, traditional vs digital marketing, digital marketing ecosystem, digital marketing channels, digital consumer behavior, role of technology in marketing, ethical and legal issues in digital marketing, privacy and data protection, opportunities and challenges in digital marketing. (8)

Unit 2- Digital Marketing Platforms & Tools: Search Engine Marketing (SEM) Vs Search Engine Optimization (SEO) – SEO and PPC, Google Ads, keyword research, on-page and off-page SEO, content marketing, email marketing, social media marketing (Facebook, Instagram, LinkedIn, Twitter), influencer marketing, mobile marketing, affiliate marketing, display advertising, programmatic advertising. Understanding domain names & extensions. Types of websites. (10)

Unit 3- Web Analytics & Performance Measurement: Introduction to web analytics-purpose, goals and objectives Google Analytics, key metrics – reach, impressions, CTR, CPC, CPA, ROI, ROAS, conversion tracking, A/B testing, attribution models, dashboard and reporting, data visualization, interpretation of analytics for decision making. Web Analytics tools and methods. Web Analytics mistakes and pitfalls. (9)

Unit 4- Digital Strategy & Planning: Digital marketing strategy framework, STP in digital marketing, customer journey mapping, marketing funnel (TOFU, MOFU, BOFU), omnichannel marketing, content strategy, budget allocation, campaign planning, risk management, crisis management in digital space. (8)

Unit 5- Emerging Trends in Digital Marketing: AI in digital marketing, chatbots, marketing automation, personalization, AR/VR in marketing, metaverse marketing, voice search, social commerce, video marketing, future trends and career opportunities in digital marketing. (10)

Suggested Text Books:

1. Chaffey, D., & Ellis-Chadwick, F. (2019). Digital Marketing: Strategy, Implementation and Practice (7th ed.). Pearson Education.
2. Ryan, D. (2016). Understanding Digital Marketing (4th ed.). Kogan Page.
3. Kaushik, A. (2010). Web Analytics 2.0. Sybex.
4. Kingsnorth, S. (2019). Digital Marketing Strategy: An Integrated Approach. Kogan Page.

Suggested Reference Books:

1. Strauss, J., Frost, R., & Ansary, A. (2016). E-Marketing. Pearson.
2. Kapoor, K. K., Dwivedi, Y. K., & Piercy, N. (2016). Advances in Digital Marketing. IGI Global.

Suggested e-resources:

1. <https://analytics.google.com>
2. <https://ads.google.com>
3. <https://www.hubspot.com/resources>

Financial Management Specialization (Semester-IV)

Semester: IV	R25-MBA-SCC-406FIN	International Finance
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Core Course- Compulsory

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
406FIN.1	Remembering	RECALL the basic concepts associated with international finance.
406FIN.2	Understanding	EXPLAIN the various the concepts related to Foreign Exchange Markets, its transactions and Taxation Systems
406FIN.3	Applying	APPLY concepts of international exchange markets and exchange rates in currency convertibility
406FIN.4	Analysing	ANALYZE the role of exchange rate and credit rating agencies, foreign exchange transactions, taxation system, Receivables and cash management in International financial market.
406FIN.5	Evaluating	EVALUATE the International Monetary Fund, World Bank, credit rating agencies, foreign exchange, foreign exchange transactions, taxation system, Receivables and cash management in International finance.
40FIN.6	Creating	CREATE the investment/ business plan by adopting various international finance concepts

Unit 1- Introduction to International Finance: Meaning/Importance, Scope, Globalization of the World Economy, Goals of International Finance, Structure and participants of the global financial system, Functioning of the global financial system in the globalization process, Emerging Challenges in International Finance, Evolution of International Monetary System, International Financial Institutions: International Monetary Fund, World Bank. International credit rating agencies (8)

Unit 2- Introduction to Foreign Exchange Markets: Structure of Foreign Exchange Markets, Types of Transactions and Settlement Date, Exchange Rate Quotations and Arbitrage, Interest Rate Parity, Purchasing Power Parity and Fisher's Parity, Forecasting Exchange Rates: Efficient Market Approach, Fundamental Approach, Technical Approach, Global Financial Markets and Interest Rates Concept and types of currency, Convertibility of currency, Exchange rate: the nature, types and regimes, Demand and supply of foreign currency..(8+2)

Unit 3- The transactions on the international foreign exchange market: Spot transactions, forward contracts, Future transactions, Swap transactions, option transactions, Transaction Exposure and Types, Foreign bonds market, Eurobonds market, Types of Bonds, floating

Rate Notes (FRNs), Deep Discount Bonds, Zero Coupon Bonds, Dual Currency Bonds, and Equity related Bonds, Procedure for Bonds Issues. (8)

Unit 4- Taxation Systems and Legal Aspects: International double taxation and the ways of its regulation, Tax evasion, Definition of Money Laundering, organization of money laundering procedure: stages and methods, Monitoring, International cooperation in dealing with money laundering: the establishment of legal framework, The functions and activity of the FATF. (8+2)

Unit 5- International Receivables and cash management: Foreign exchange risk, The essence and types of currency risks, Risks of making decisions about foreign direct investment, Political risk, International Financial Reporting Standards (I.F.R.S) and Indian Accounting Standards (I.A.S) on foreign transactions, Foreign Exchange Trade Settlement in India, SWIFT, CHIPS, CHAPS. (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

1. International Finance by Rajiv Srivastav, Oxford University Press
2. International Financial Management by P.G. Apte 2010 Ed.
3. International Financial Management by Vyuptakesh Sharan
4. International Financial Management by S.P. Srinivasan
5. International Finance by Maurice Levi, Keith P. (2013 Edition)
6. Foreign Exchange, International Finance, Risk Management by A.V. Rajwade
7. Currency Exposures and Derivatives by A.V Rajwade

Suggested Reference Books:

1. International Finance, by Maurice Levi, 5th edition, Mc Graw Hill
2. International Financial Management by Jeff Madura; 2008, Cengage Learning
3. International Financial Management by Eun and Resnick, 4th edition Tata McGraw Hill
4. International Economics by Carbaugh 11th Edition, Cengage Learning.
5. Paul R Krugman and Maurice Obstfeld, 'International Economics', 8th edition
6. Multinational Financial Management by Alan Shapiro, 9th Ed, Wiley

Suggested e-resources:

1. https://www.youtube.com/watch?v=JY56Jukjc0Y&list=PLbt71Uk_zJIqvRfuUALPMKyTDu3DtlWwo
2. https://www.youtube.com/watch?v=021o1s2rWyM&list=PLbt71Uk_zJIqvRfuUALPMKyTDu3DtlWwo&

Semester: IV	R25-MBA-SEC-407FIN	Goods & Services Tax
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
407FIN.1	Remembering	Explain the structure, objectives and constitutional framework of GST in India.
407FIN.2	Understanding	Describe registration, return filing and compliance mechanisms under GST.
407FIN.3	Applying	Compute GST liability including valuation and tax calculation.
407FIN.4	Analysing	Analyze input tax credit provisions and reverse charge mechanism.
407FIN.5	Evaluating	Evaluate GST impact on business transactions including interstate and international trade.
407FIN.6	Creating	Prepare GST returns and suggest compliance strategies for business entities.

Unit 1: Introduction to GST and Constitutional Framework: Concept of Indirect Taxes, Need and Genesis of GST in India, Objectives and Advantages of GST, Dual GST Model: CGST, SGST, UTGST, IGST, GST Network (GSTN), GST Council – Structure, Role and Phases, Constitutional Amendments relating to GST, GST Compensation Cess. **(8+2)**

Unit 2: Registration and Returns under GST: Registration Procedure under GST, Persons not liable for Registration, Compulsory Registration, Deemed Registration, Cancellation and Revocation of Registration, Unique Identification Number (UIN), GST Registration Number Format (GSTIN), **Returns under GST:** Types of GST Returns, Periodicity of Returns, Returns for: Regular Taxpayer, Composition Taxpayer, Casual Taxable Person, Non-Resident Taxable Person, Late Filing, Late Fee and Interest **(8)**

Unit 3: Supply, Valuation and Levy of GST: Levy and Collection of GST, Meaning and Scope of Supply, Types of Supply under GST, Place of Supply, Interstate and Intrastate Supply, Export and Import of Goods and Services, Composition Levy Scheme, Exemption from GST, Person Liable to Pay Tax, Tax Deduction at Source (TDS) under GST, **Valuation of Supply:** Transaction Value, Inclusion and Exclusion in Value, Determination of Taxable Value, **Practical Component (Numerical Focus – 20% Weightage):** Computation of GST Liability, Valuation of Supply, Calculation of CGST, SGST, IGST **(8+2)**

Unit 4: Input Tax Credit (ITC) and Compliance Mechanism: Concept and Eligibility of Input Tax Credit, Negative List for ITC, ITC Utilization Rules, ITC Reversal Provisions, Reverse Charge Mechanism (RCM), Types of GST Returns and Due Dates, Late Filing,

Interest and Penalty, New GST **Return System**: Overview and Forms, Invoice Matching Concept, Amendments and Offline Utilities **(8+2)**

Unit 5: GST and Customs Integration: Definitions under Customs Act and Customs Tariff Act, Levy and Types of Customs Duties, Basic Customs Duty, IGST on Imports, Protective Duty, Safeguard Duty, Countervailing Duty, Anti-Dumping Duty, Import Procedure, Export Procedure, Valuation of Imported Goods, Valuation of Export Goods, Refund under GST and Customs, Penalties under Customs Law. **(8+1)**

Note:

- Theory : Numerical :: 80 : 20
- Numerical mainly from Unit 3 (Valuation and GST Calculation)

Suggested Text Books:

1. Suggested Textbooks: 1. Indirect Tax Reform in India: 1947 To GST and Beyond Book by Vinay K. Srivastava and Yashwant Sinha
2. GST Acts, Rules & Forms with Reference By Ashok Batra
3. Taxmann's Basics of GST
4. Taxmann's GST: A practical Approach Theory & Practice of GST, Srivathsala, HPH
5. Theory & Practice of GST: Dr. Ravi M.N, PBP.

Semester: IV	R25-MBA-SEC-408FIN	Direct Taxation
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
408FIN.1	Remembering	Explain fundamental concepts and definitions under the Income Tax Act, 1961.
408FIN.2	Understanding	Describe provisions relating to residential status, exempt income, and different heads of income.
408FIN.3	Applying	Compute taxable income under the heads Salary, House Property, Business/Profession, Capital Gains and Other Sources.
408FIN.4	Analysing	Analyze tax implications of business and financial transactions.
408FIN.5	Evaluating	Evaluate tax planning techniques within the legal framework distinguishing tax avoidance and tax evasion.
408FIN.6	Creating	Prepare complete computation of total income and tax liability including deductions, set-off and compliance requirements.

UNIT1- Introduction to Direct Taxation: Basic Definitions and Concepts: Direct Tax, Indirect Tax, Income, Agricultural Income, Person, Assesse, Assessment Year, Previous Year, Gross Total Income, Total Income, Maximum Marginal Rate of Tax, Residential Status, Scope of Total Income based on Residential Status, Exempted Income under Section 10, New vs Old Income Tax Regime. (8)

UNIT 2 -Income under the Head “Salaries” & “Income from House Property”: Income from Salaries: Meaning of Salary, Basis of Charge of Salary Income, Different Forms of Salary, Allowances (Taxable & Exempt), Perquisites (as per amendments of Finance Act 2020), Permissible Deductions from Salary Income, Tax Treatment of Provident Fund. **Income from House Property:** Basis of Charge, Property Income not Charged to Tax, Computation of Income from Let-Out Property, Computation of Income from Self-Occupied Property. **Practical Component:** Numerical problems on Salary and House Property. (8+2)

UNIT 3- Income under the Head “Profits and Gains of Business or Profession”: Basis of Charge, Chargeable Incomes, Computation of Profit or Gain from Business and Profession, Expenses Expressly Allowed, General Deductions, Expenses Specifically Disallowed, Specific Deductions, Amounts Not Deductible, Revision of Tax Audit Report (2021). **Practical Component:** Numerical problems on Business Income computation. (8)

UNIT 4- Income under the Head “Capital Gains” & “Other Sources: Capital Gains: Meaning of Capital Gain, Basis of Charge, Important Definitions: Capital Asset, Short-Term Capital Asset, Long-Term Capital Asset, Transfer of Capital Asset, Short-Term Capital Gain, Long-Term Capital Gain, Computation of Capital Gains, **Income from Other Sources:** Incomes Chargeable under Section 56, Deductions Allowable (Section 57), Deductions Not Allowable (Section 58), Bond Washing Transactions, Dividend Stripping (Section 94), **Practical Component:** Numerical problems on Capital Gains and Other Sources. (8+2)

UNIT5 -Net Taxable Income and Other Provisions: Computation of Net Total Income based on Five Heads, Set-off and Carry Forward of Losses, Deductions under Section 80, Computation of Income Tax Liability, Advance Payment of Tax, Tax Deducted at Source (TDS), Tax Planning vs Tax Evasion, Filing of Income Tax Returns, E-filing of ITR, **Practical Component:** Comprehensive Problem covering Total Income and Tax Liability.. (8+1)

Suggested Books

1. Ravi Kishore – Direct Taxes
2. J.P. Jakhotiya – Direct Taxes
3. Chris Skinner – Digital Bank: Strategies to Launch or Become a Digital Bank
4. Dr. Pradip Kumar Sinha – Direct Taxation
5. Prof. L. P. Wakale- Income Tax Practice & Procedure
6. Dr. Vinodkumar Pathade- Direct Taxes

Suggested Reference Material

1. Dr. Vinod Singhania – Students’ Guide to Income Tax (Taxmann)
2. V.P. Gaur, D.B. Narang, Puja Ghai & Rajiv Puri – Income Tax Law and Practices (Kalyani Publication)
3. T.N. Manoharan & G.R. Hari – Students’ Handbook on Income Tax (Snow White Publications Pvt. Ltd.)

Semester: IV	R25-MBA-SEC-409FIN	Financial Modeling with Excel
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
409FIN.1	Remembering	Remember the concepts, terminologies, frameworks, tools and techniques of Financial modeling
409FIN.2	Understanding	UNDERSTAND the applications and use of MS Excel in financial modeling and its different techniques
409FIN.3	Applying	DEVELOP, APPLY and actually use core functionality of MS Excel in decision framework to solve managerial problems
409FIN.4	Analysing	ANALYSE different financial models in order to eliminate substantial risk of poor spreadsheet coding
409FIN.5	Evaluating	FORMULATE an idea and acceptable solutions to solve different problems in the area of financial management
409FIN.6	Creating	FORMULATE an idea and acceptable solutions to solve different problems in the area of financial management

Unit 1- Introduction: Meaning, Benefits and Uses of Financial Modeling. 1.2) Basic Excel for Financial Modeling: Formatting of Excel Sheets, Use of Excel Formula Function, Advanced Modeling Techniques, Data Filter and Sort, Charts and Graphs, Table formula and Scenario building, Lookups: Vlookup Match & offset, pivot tables.(8)

Unit 2- Financial Statement Analysis: Introduction to Financial Statement Analysis, Financial Reporting Mechanics, Understanding Income Statement, Balance Sheet, Cash Flow Statement, Financial Analysis Techniques, Inventories, Long Lived Assets, Non Current Liabilities, Application of Financial Statement. (8+2)

Unit 3- Financial Ratios: Ratio analysis of industries, Du point Analysis, Peer to peer analysis, Preparation of Financial Analysis report on an industry. (8)

Unit 4- Financial Management: Time value of money, Long term financing, Cost of capital, Measure of Leverage, Budgets, Types of Budgets. (8+2)

Unit 5- Equity Research Modeling: Prepare an Income Statement, Balance sheet, Cash Flow Statement, Geographic Revenue Sheet, Segment, Revenue Sheet, Cost Statement, Debt Sheet, Analyze Revenue Drivers, Forecast Geographic & Segment Revenues, Cost Statement, Debt, Income Statement, Balance Sheet, and Cash Flow Statement, Performa Adjustments, Income Statement - Compute Margins, Balance Sheet -Compute Ratios, Cash Flow Statement Projection, Valuation- Discounted Cash Flow Method (DCF), Valuation – Relative

Valuation (Football Field Chart), Valuation – Assumptions for Valuation Model, Prepare Valuation Model, Prepare Presentation Sheet, Prepare Company Overview , Sector Overview. (8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

- 1) Business Data Analysis using Excel – David Whigham – Oxford University Press
- 2) Mastering Financial Modeling in Microsoft Excel – Alastair L. Day
- 3) Practical Financial Modeling – Jonathoan Swan

Suggested Reference Books:

- 1) Financial Modeling Using Excel and VBA by Chandan Sengupta, John Wiley & Sons
- 2) Building Financial Models with Microsoft Excel: A Guide for Business Professionals, K. Scott Proctor, 2nd Edition, John Wiley & Sons
- 3) Advanced Modeling in Finance using Excel and VBA By Mary Jackson, Mike Staunton, John Wiley & Sons
- 4) Next Generation Excel: Modeling in Excel for Analysts and MBAs By Isaac Gottlieb, John Wiley & Sons
- 5) Financial Modeling Module, NSE Academy

Suggested e-resources:

1. https://www.youtube.com/watch?v=-vLn timer 3Qyuw&list=PLNz-V8ZQGj1b9o_M3e8nmq-JouhCTkXYN
2. https://www.youtube.com/watch?v=-vLn timer 3Qyuw&list=PLNz-V8ZQGj1b9o_M3e8nmq-JouhCTkXYN

Semester: IV	R25-MBA-SEC-410FIN	Strategic Cost Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
410FIN.1	Remembering	Remember the basic concepts, tools and techniques of cost management in the contemporary business environment and how it has influenced cost management
410FIN.2	Understanding	EXPLAIN in detail, all the theoretical concepts taught through the syllabus; differentiate between various costing techniques.
410FIN.3	Applying	ILLUSTRATE contemporary management techniques and how they are used in cost management to respond to the contemporary business environment.
410FIN.4	Analysing	ANALYSE the situation and decide the key cost factors / elements involved in the decision making
410FIN.5	Evaluating	FORMULATE new models and techniques for managing the cost strategically in any business organization.
410FIN.6	Creating	DESIGN and innovative cost management strategies and integrated systems by applying advanced costing techniques and contemporary management tools to enhance organizational efficiency and competitiveness in a dynamic business environment.

Unit 1- Introduction to Strategic Cost Management: Meaning, conceptual framework, significance and objectives of SCM, Traditional Cost Management Vs Strategic Cost Management. Role of SCM in Strategic Positioning & Strategic position analysis, Cost Control and Cost Reduction in SCM, Cost of Quality Role of AI and Data Analytics in cost management (predictive analysis, forecasting), impact of digital transformation on cost structures, use of ERP systems for cost control. (8)

Unit 2- Strategic Cost Analysis and Decision making in SCM: Life Cycle costing, Target Costing, Value Analysis and Value Chain analysis, Value Engineering, Value management, Throughput Costing, Lean Accounting, Socio Economic Costing, Business Process Outsourcing (BPO), Application of strategic costing techniques in managerial decision making and performance improvement. (8+2)

Unit 3- Activity Based Costing: Concept, Purpose, Benefits and Stages, Relevance in Decision Making and its Application in Budgeting. Traditional Vs. ABC System – Comparative Analysis, Application of ABC, Practical implications of ABC in cost control, budgeting and profitability analysis.(8)

Unit 4- Strategic Cost Management for Specific Sectors: Agricultural Sector, Information Technology Sector, Power Sector, Automobile Sector, Healthcare sector, Hospitality Sector, Education Sector, etc., Sector-wise application of cost management practices and challenges in different industries. (8+2)

Unit 5- Target Costing and Kaizen Costing: Target Costing – Introduction, Key Principles, Methodology, Procedures, Advantages and Implementation. Kaizen Costing – Meaning, concepts, procedure for implementation, evaluation, benefits, challenges and standards. Target Costing v/s Kaizen Costing: Similarities and Differences, Role of continuous improvement and cost innovation in achieving organizational efficiency and competitiveness.(8+1)

Note: Relevant cases/examples must be discussed

Suggested Text Books:

- 1.Strategic Cost Management – Dr. Jawahar Lal, Himalaya Publishing House.
2. Cost Management – Kishore Ravi M.
- 3.Taxmann Cost Accounting. Lal, Jawahar. Tata Mcgraw-Hill Pub. Co. Ltd.

Suggested Reference Books:

1. Strategic Cost Management The New Tool for Competitive Advantage – John K. Shank & Vijay Govindrajana, The Free Press.
2. Education Cost Management A Strategic Emphasis – Edward Blocher, David Stout, Paul Juras & Steven Smith, McGraw Hill

Suggested e-resources:

- 1.<https://www.youtube.com/watch?v=CrJkrJq5xac>
- 2.<https://www.youtube.com/watch?v=NOURcolMCoI>

Semester: IV	R25-MBA-SEC-411FIN	Rural & Micro Finance
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
411FIN.1	Remembering	Explain the concepts, evolution, and significance of rural microfinance in the Indian economy.
411FIN.2	Understanding	Describe various microfinance delivery models, financial products, and institutional structures operating in India.
411FIN.3	Applying	Apply microfinance lending models and financial inclusion strategies to rural development scenarios.
411FIN.4	Analysing	Analyze the role of SHGs, MFIs, and regulatory institutions in promoting financial inclusion and women empowerment.
411FIN.5	Evaluating	Evaluate the performance, challenges, and sustainability of microfinance institutions in the Indian context.
411FIN.6	Creating	Propose strategic measures to strengthen rural microfinance systems for inclusive and sustainable growth.

Unit I: Foundations and Architecture of Rural Financial Inclusion: Background, Concept and Fundamentals of Microfinance; Characteristics of Microfinance; Evolution of Microfinance in India; Microfinance & Banking; The Grameen Bank model and its relevance to India; Microfinance & Micro Credit; Role of NGOs in Microfinance; Channels of Microfinance; Microfinance & Rural Development – Role of MFIs in Rural Credit; Types of Rural Credit; Poverty, Microfinance and Economic Well-being; Microfinance & Women Empowerment; Financial Inclusion; Government initiatives for Financial Inclusion including Pradhan Mantri Jan Dhan Yojana and Deendayal Antyodaya Yojana – National Rural Livelihoods Mission; Digital Financial Inclusion in rural areas.. **(8)**

Unit II: Microfinance Delivery Mechanisms and Financial Products: Microfinance Delivery Models; SHG–Bank Linkage Programme; Joint Liability Group (JLG) Model; MFI Group Lending Model; MFI Individual Lending Model; MFI Loan Products and Related Issues; MFI Savings and Saving Products; Remittances; Micro Insurance; Micro-Pension Schemes; Role of Small Finance Banks and Payments Banks in Microfinance; Regulatory framework of Reserve Bank of India for NBFC-MFIs.. **(8+2)**

Unit III: Institutional Framework and Governance of Microfinance Sector: Governance and Constitution of the Board of MFIs; Various Forms of MFIs in India (NBFC-MFI, Section 8 Companies, Cooperatives, Trusts, Small Finance Banks); Intermediaries for Microfinance; Commercialization of MFIs; Credit Rating of MFIs; Social Performance Measurement;

Challenges to MFIs – Over-indebtedness, NPAs, Political and Regulatory Issues; Role of NABARD in strengthening rural credit systems. (8)

Unit IV: Community-Based Microfinance and SHG Movement in India: Capital Gains: Meaning of SHGs; Pattern and Functions of SHGs; Funding Agencies of SHGs; Provisions under SHGs – Savings, Credit, Marketing & Insurance; Financial & Social Inclusion through SHGs; SHGs and Entrepreneurship Development; SHG–Bank Linkage Programme; Training and Capacity Building of SHGs; Cluster Level Federations (CLFs); Role of NABARD in SHG Promotion; SHGs and Economic Empowerment; Role of SHGs in Poverty Alleviation – Indian Case Studies. (8+2)

Unit V: Contemporary Developments and Strategic Dimensions of Microfinance: Recent Trends in Indian Microfinance; Microfinance & Sustainable Development; Green Microfinance; Role of Technology in Microfinance; Digital and Mobile Banking in Rural Areas; Microfinance & Gender Equality; Impact of Microfinance on Women Empowerment; Strategic Alliances among MFIs, Banks, NBFCs and Government Agencies; Future of Microfinance in India from an Inclusive Growth Perspective. (8+1)

Suggested Books

1. Microfinance in India – K. G. Karmakar, Sage Publications, New Delhi.
2. Macro Dynamics of Microfinance – Daniel Lazar, P. Natarajan & Malabika Deo, Excel Books.
3. The Economics of Microfinance – Beatriz Armendáriz & Jonathan Morduch, MIT Press.
4. Microfinance and Poverty Eradication – Daniel Lazar & P. Palanichamy, New Century Publications, New Delhi.
5. Rural Economy of India – A.N. Agarwal & Kundana Lal, Vikas Publishing House.
6. Indian Economy – S.K. Misra & V.K. Puri, Himalaya Publishing House, Mumbai.

Suggested Reference Books

1. Financial Inclusion in India – N. Kumar & R. Mohanty.
2. Microfinance India: State of the Sector Report – ACCESS Development Services (Annual Publication).
3. Banking and Microfinance in India – R.K. Sharma, New Century Publications.
4. Rural Development in India – Katar Singh, Sage Publications.
5. Indian Economy – Dutt & Sundaram, S. Chand Publications.
6. Self Help Groups and Microfinance – S. Nakkiran, Deep & Deep Publications.
7. Publications and circulars of the Reserve Bank of India and NABARD (Latest Guidelines on NBFC-MFIs, SHG–Bank Linkage, Financial Inclusion).

Human Resource Management Specialization (Semester-IV)

Semester: IV	R25-MBA-SCC-406HRM	Employee Relations and Labour Legislations
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Core Course- Compulsory

Course Objective:

1. To develop understanding of industrial relations and employee relations in Indian context.
2. To study key labour legislations and their applicability in organizations.
3. To equip students with skills to handle disputes, grievances, and compliance effectively.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
406HRM.1	Remembering	Recall concepts, principles, and laws related to employee & industrial relations
406HRM.2	Understanding	Explain the framework of industrial relations and labor legislation.
406HRM.3	Applying	Apply labour laws and ER practices to workplace scenarios
406HRM.4	Analysing	Analyse conflicts, disputes, and compliance requirements.
406HRM.5	Evaluating	Evaluate strategies for dispute resolution and policy adherence
406HRM.6	Creating	Design recommendations and action plans for effective ER & IR management

Unit 1: Strategic Employee Relations in a Changing Work Environment

Concept, scope, objectives, and importance of Employee Relations; evolution from Industrial Relations to Strategic Employee Relations; changing nature of work in the context of technology, globalization, and workforce diversity; approaches to ER including Dunlop's Systems Approach, Human Relations Approach, Social Action Approach, and Gandhian philosophy; role of the International Labour Organization and its relevance in India; emerging ER practices in the gig economy and remote work environment. (8)

Unit 2: Mechanisms for Building Harmonious Employee Relations

Collective bargaining—meaning, process, essential conditions, and importance of bargaining units; Workers' Participation in Management; negotiation and problem-solving techniques; grievance redressal system including sources and procedures; role of committees; use of digital tools in managing employee relations.(8+2)

Unit 3: Labour Legislations Governing Employee Relations

Industrial Disputes Act, 1947—definitions of industry, workman, and industrial dispute; authorities and provisions relating to strikes, lockouts, layoffs, retrenchment, and closure; Contract Labour (Regulation and Abolition) Act, 1970—advisory boards, registration, licensing, welfare measures, health provisions, and record-keeping; brief overview of recent labour law developments (8)

Unit 4: Trade Unions, Wage Protection and Emerging Unionism

Trade Unions Act, 1926—formation, registration, rights, and types of unions; Maharashtra Recognition of Trade Unions and Prevention of Unfair Labour Practices Act, 1971—unfair labour practices, authorities, complaints, and penalties; Minimum Wages Act, 1948—wage fixation, revision, working hours, and compliance; role of trade unions in the platform economy with examples such as Swiggy, Uber, and Zomato.(8+2)

Unit 5: Labour Legislations for Safe, Inclusive and Equitable Workplaces

Factories Act, 1948—definitions and provisions related to health, safety, welfare, working hours, and leave, along with child labour provisions; Maternity Benefit Act, 1961—eligibility, leave, and crèche facilities; Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013—definitions, complaint mechanisms, and Internal Complaints Committee; contemporary aspects of workplace safety and employee well-being.(8+1)

Note: Latest editions of Bare Acts and amendments to labour laws should be referred to for updated legal provisions. Relevant case laws and practical examples should be discussed wherever applicable.

Suggested Text Books:

1. C. B. Mamoria, Personnel Management.
2. Rudrabaswaraj, Dynamics of Personnel Administration.Edwin B. Flippo, Personnel Management.
3. S. P. Jain, Industrial and Labour Laws.
4. K. Aswathappa, Human Resource Management – Text and Cases, McGraw Hill Education (India).

Suggested Reference Books:

1. S. D. Puri, Guide on Labour Management Forms and Precedents (Law, Practice and Procedure), Snow White Publications.
2. Avatar Singh, Introduction to Labour and Industrial Laws.
3. N. D. Kapoor, Elements of Mercantile Law, Sultan Chand & Sons.
4. Bare Acts (Latest Editions of Labour Legislations).
5. Michael Armstrong, Armstrong's Handbook of Human Resource Management Practice, Kogan Page.
6. Gary Dessler, Human Resource Management, Pearson Education.

7. C. S. Venkata Ratnam, Globalization and Labour Management Relations, Oxford University Press.

Suggested e-resources:

1. Ministry of Labour and Employment
<https://labour.gov.in> (Labour policies, acts, notifications, and updates)
2. Directorate General Factory Advice Service and Labour Institutes
<https://dgfasli.gov.in> (Factory safety, health, and welfare guidelines)
3. International Labour Organization
<https://www.ilo.org> (Global labour standards, conventions, and reports)
4. e-SHRAM Portal
<https://eshram.gov.in> (Information on unorganized and gig workforce in India)
5. SWAYAM
<https://swayam.gov.in> (Courses on Labour Laws, HRM, Industrial Relations)
6. NPTEL
<https://nptel.ac.in> (Video lectures on HRM, Employee Relations, Labour Laws)

Semester: IV	R25-MBA-SEC-407HRM	Organizational Diagnosis and Development
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. To develop an understanding of the concepts, principles, and evolution of Organizational Development (OD).
2. To familiarize learners with various models and tools of organizational diagnosis for analyzing organizational effectiveness.
3. To enable application of OD interventions for improving individual, team, and organizational performance.
4. To build competence in designing and implementing change initiatives in dynamic and complex organizational environments.
5. To enhance understanding of the role, skills, and responsibilities of an OD consultant in managing organizational change.
6. To develop analytical and problem-solving abilities for addressing real-life organizational issues through appropriate OD strategies.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
407HRM.1	Remembering	Describe major theories, concepts, models, tools, and frameworks in Organizational Diagnosis and Development.
407HRM.2	Understanding	Explain the concept of Organizational Development and the nature of interventions.
407HRM.3	Applying	Apply OD theories, models, and frameworks in organizational settings.
407HRM.4	Analysing	Analyze internal and external environments using appropriate diagnostic tools and assess the role of an OD consultant.
407HRM.5	Evaluating	Identify and map suitable OD interventions to organizational needs.
407HRM.6	Creating	Design OD interventions and define the role of a consultant for organizational issues.

Unit 1: Foundations of Organizational Development

Definition, characteristics, and objectives of Organizational Development; historical evolution with contributions of Kurt Lewin, Douglas McGregor, Herbert Shepard, Robert Blake, and Tannenbaum; foundations of OD including T-Groups, Systems Theory, Parallel Learning Structures, Double-Loop Learning, and Action Research; contemporary drivers such as Agile HR, digital transformation, and change in dynamic environments.. (8)

Unit 2: Organizational Diagnosis – Models and Techniques

Concept and importance of organizational diagnosis; traditional and emerging models including Weisbord's Six-Box Model and diagnostic questionnaire; application of Porter's Five Forces and PESTEL analysis in Indian and global contexts; introduction to data-driven diagnosis and organizational analytics. (8+2)

Unit 3: Team and Intergroup Interventions in Modern Workplace

Concept and classification of interventions (team, intergroup, structural, comprehensive); team interventions including diagnostic meetings, team building, process consultation, role analysis, interdependency exercises, and responsibility charting; intergroup interventions such as Walton's approach and organization mirror; contemporary practices including virtual team development, remote collaboration, and gamification in team building. (8)

Unit 4: Comprehensive and Structural Interventions

Comprehensive interventions including confrontation meetings, survey feedback, appreciative inquiry, and Grid OD; structural interventions such as socio-technical systems, work redesign, quality circles, and business process re-engineering; contemporary approaches including design thinking in OD, change management in hybrid work culture, and digital transformation interventions. (8+2)

Unit 5: OD Consultant and Emerging Practices

Meaning, role, and responsibilities of an OD consultant; client-consultant relationship and process; competencies required for OD professionals; challenges in OD practice; practical case studies; emerging trends such as digital OD consulting, use of HR analytics, and consulting in agile organizations. (8+1)

Note: Latest editions of Bare Acts and amendments to labour laws should be referred to for updated legal provisions. Relevant case laws and practical examples should be discussed wherever applicable.

Suggested Text Books:

1. Wendell L. French & Cecil H. Bell, Organization Development, Prentice Hall.
2. Thomas G. Cummings & Christopher G. Worley, Organization Development and Change, Cengage Learning.
3. Dr. Anand Dadas & Dr. Rajendra Subnis, Organizational Diagnosis & Development, Himalaya Publishing House.
4. T. V. Rao, S. Ramanarayan & Kuldeep Singh, Organization Development, Sage Publications.

Suggested Reference Books:

1. Michael E. Porter, Competitive Strategy: Techniques for Analyzing Industries and Competitors, Free Press.
2. C. Appa Rao, B. Parvathiswara Rao & K. Sivaramakrishna, Strategic Management and Business Policy, Excel Books.

3. Edgar H. Schein, Organizational Culture and Leadership, Jossey-Bass.
4. Peter Senge, The Fifth Discipline: The Art and Practice of the Learning Organization, Doubleday.

Suggested e-resources:

1. Society for Human Resource Management <https://www.shrm.org> (Articles on OD practices, change management, and HR interventions)
2. Harvard Business Review <https://hbr.org> (Case studies and insights on organizational change and leadership)
3. International Labour Organization <https://www.ilo.org> (Workplace transformation, organizational change, and labour trends)
4. SWAYAM <https://swayam.gov.in> (Courses on HRM, Organizational Behaviour, and OD)
5. NPTEL <https://nptel.ac.in> (Video lectures on Organizational Behaviour and Development)
6. Coursera / edX (Courses on change management, leadership, and organizational development)

Semester: IV	R25-MBA-SEC-408HRM	Compensation and Reward Management
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. To develop an understanding of the concepts, principles, and strategic importance of compensation and reward management in organizations.
2. To familiarize learners with compensation policies, planning, job evaluation techniques, and development of equitable pay structures.
3. To enable learners to design and implement wage and salary administration systems aligned with organizational and statutory requirements.
4. To build competence in designing incentive plans, reward systems, and innovative compensation structures for diverse organizational settings, including startups.
5. To enhance understanding of monetary and non-monetary rewards and their role in improving employee performance, motivation, and retention.
6. To develop the ability to analyze and respond to emerging trends and challenges in compensation, including global practices, gig economy, and pay equity.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
408HRM.1	Remembering	Recall fundamental concepts, types, and frameworks of compensation management and its strategic role.
408HRM.2	Understanding	Explain compensation policies, planning, job evaluation techniques, and equitable pay structures..
408HRM.3	Applying	Design incentive plans, profit sharing, gain sharing, and reward structures for different organizations.
408HRM.4	Analysing	Examine components of reward systems and recent developments in monetary and non-monetary rewards.
408HRM.5	Evaluating	Assess emerging trends in compensation practices including gig economy, MNCs, and remote workforce.
408HRM.6	Creating	Formulate strategies for effective total compensation aligned with organizational goals and global trends.

Unit 1: Strategic Compensation Management- Concept, types, and framework of compensation; compensation policy, planning, and strategy; job evaluation and pay structures; internal and external equity; development of total compensation strategy for competitive advantage; compensation structure, benefits of fair pay systems, and key compensation issues; merits and limitations of different compensation systems. (8)

Unit 2: Wage and Salary Administration- Concepts of wages and salary; minimum, fair, and living wage; theories of wages; wage fixation machinery and statutory provisions; wage

components; salary benchmarking; KRA and KPI linkage; wage and salary surveys, wage curve, pay grades and ranges; preparation of salary matrix and pay fixation. (8+2)

Unit 3: Incentives, Rewards and Pay Design -Meaning and determinants of incentives; incentive calculation; individual, group, and team-based incentive plans; profit sharing and gain sharing; employee stock option plans (ESOPs); non-monetary rewards and cafeteria compensation; retention strategies; designing compensation structures for startups and new-age organizations. (8)

Unit 4: Reward Management Systems-Concept, aims, and components of reward management; monetary and non-monetary rewards; role of rewards in organizations; strategic alignment of reward systems with business goals; reward practices in knowledge and service economies; executive compensation and recognition systems; evolving reward strategies in modern organizations. (8+2)

Unit 5: Emerging Trends in Compensation-Compensation practices in multinational organizations; strategic compensation systems; gig economy and freelancer compensation (e.g., Uber, Swiggy); on-demand pay and digital compensation systems; pay equity, gender pay gap, and DEI considerations; global mobility programs; compensation challenges in remote and hybrid work environments. (8 +1)

Note: Classroom exercises should include designing salary structures, incentives, rewards, and benefits plans.

Suggested Text Books:

1. Tapomoy Deb, Compensation Management: Text and Cases, Excel Books, 2014.
2. Joseph J. Martocchio, Strategic Compensation: A Human Resource Management Approach, Pearson Education, 3rd Edition, 2012.

Suggested Reference Books:

1. Dipak Kumar Bhattacharyya, Compensation Management, Oxford University Press, 2014.
2. Richard I. Henderson, Compensation Management in a Knowledge-Based World, Prentice Hall, 9th Edition, 2012.
3. George T. Milkovich & Jerry M. Newman, Compensation, Tata McGraw-Hill, New Delhi, 2015.

Suggested e-resources:

1. Ministry of Labour and Employment= <https://labour.gov.in> (Compensation laws, wage codes, and policy updates)
2. International Labour Organization <https://www.ilo.org> (Global wage standards, pay equity, and compensation trends)
3. Society for Human Resource Management <https://www.shrm.org> (Insights on compensation strategy, benefits, and rewards)

4. World Economic Forum <https://www.weforum.org> (Reports on future of work, pay trends, and workforce transformation)
5. SWAYAM <https://swayam.gov.in> (Courses on HRM, compensation, and reward management)

Semester: IV	R25-MBA-SEC-409HRM	Performance Management Systems
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. To develop an understanding of the concepts, frameworks, and theoretical foundations of performance management systems.
2. To familiarize learners with the performance management process, including goal setting, performance planning, and review mechanisms.
3. To enable application of performance measurement techniques and tools for evaluating employee performance effectively.
4. To build competence in designing and implementing performance-linked reward and compensation systems.
5. To enhance analytical ability to interpret performance data and use it for HR decision-making and performance improvement.
6. To develop skills in designing integrated performance management systems incorporating competency mapping, feedback systems, and emerging digital practices.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
409HRM.1	Remembering	Recall concepts, frameworks, and methods of performance management and appraisal.
409HRM.2	Understanding	Explain performance management processes, goal setting, and theoretical foundations.
409HRM.3	Applying	Apply performance measurement techniques and PMS tools in organizational contexts.
409HRM.4	Analysing	Analyze performance data, identify gaps, and diagnose causes of poor performance.
409HRM.5	Evaluating	Evaluate reward systems, performance outcomes, and emerging PMS practices.
409HRM.6	Creating	Design integrated performance management systems aligned with organizational strategy.

Unit 1: Foundations of Performance Management -Performance appraisal and potential appraisal; traditional and modern appraisal methods; components of Performance Management Systems (PMS); performance planning for role clarity, accountability, and effectiveness; application of Goal Theory, Control Theory, and Social Cognitive Theory in performance management; contemporary trends such as continuous performance management, agile PMS, and employee experience. (8)

Unit 2: Performance Management Process-Overview and importance of the performance management process; performance planning and objective setting; alignment of organizational and individual goals; development of manager and employee performance

plans; setting expectations and performance standards; mid-cycle and end-cycle performance reviews; continuous feedback mechanisms.. (8+2)

Unit 3: Performance Measurement and Analytics -Determinants and approaches to performance measurement; measuring results and behaviours; diagnosing causes of poor performance; gathering and analyzing performance data; implementation of PMS; introduction to HR analytics and data-driven performance management; use of dashboards and digital tools. . (8)

Unit 4: Performance Management and Reward Systems-Performance-linked remuneration systems; types of rewards and total reward strategies; designing effective reward systems; characteristics of performance-based reward plans; performance review discussions; using PMS data for HR decisions such as promotions, training, and compensation; performance improvement strategies and managerial skills.. (8+2)

Unit 5: Performance Management and Development Systems -360-degree feedback as a developmental tool; performance-linked career planning and promotion; competency mapping; application of Balanced Scorecard; mentoring and coaching systems; assessment centres; role of technology in PMS including HRIS and digital platforms; performance management practices in Indian and global organizations (case-based approach). (8+1)

Note:

1. Classroom exercises should include goal setting (KPIs/OKRs), performance review simulations, and PMS design.
2. Relevant case studies (Indian and global) should be discussed..

Suggested Text Books:

1. Michael Armstrong & Angela Baron, Performance Management: The New Realities, Jaico Publishing House.
2. T. V. Rao, Appraising and Developing Managerial Performance, Excel Books.
3. Dipak Kumar Bhattacharyya, Performance Management Systems and Strategies, Pearson Education.

Suggested Reference Books:

1. David Wade & Ronald Recardo, Corporate Performance Management, Butterworth-Heinemann.
2. A. S. Kohli & Tapomoy Deb, Performance Management.
3. A. M. Sharma, Performance Management Systems.
4. T. V. Rao, Performance Management: Toward Organizational Excellence.
5. Prem Chadha, Performance Management, McMillan.
6. Richard I. Henderson, Compensation Management in a Knowledge-Based World, Pearson Education.

Suggested e-resources:

1. Society for Human Resource Management <https://www.shrm.org> ,
2. Management Study Guide <https://www.managementstudyguide.com>
3. Whatishumanresource.com <https://www.whatishumanresource.com>
4. Valamis <https://www.valamis.com>
5. Ways HR Consulting <https://www.wayshrconsulting.com>

Semester: IV	R25-MBA-SEC-410HRM	HR Policy Design and Governance
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. To develop an understanding of the concepts, scope, and significance of HR policies and policy frameworks in organizations.
2. To familiarize learners with the principles and processes involved in designing effective HR policies aligned with organizational goals.
3. To enable learners to analyze organizational, legal, and cultural factors influencing HR policy formulation and implementation.
4. To build competence in drafting and implementing HR policies across key functional areas such as recruitment, compensation, performance, and employee relations.
5. To enhance understanding of HR policies in the Indian and global context, including compliance, ethics, and diversity considerations.
6. To develop skills in evaluating and designing HR policies incorporating emerging trends such as digital HR, employee well-being, and inclusive workplace practices.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
410HRM.1	Remembering	Recall concepts, types, and importance of HR policies and policy manuals.
410HRM.2	Understanding	Explain principles, frameworks, and factors influencing HR policy design.
410HRM.3	Applying	Develop HR policies aligned with organizational needs and legal requirements.
410HRM.4	Analysing	Analyze HR policies in Indian and global contexts considering cultural and regulatory factors.
410HRM.5	Evaluating	Evaluate effectiveness and compliance of HR policies using best practices and benchmarks.
410HRM.6	Creating	Design comprehensive HR policy frameworks incorporating emerging trends and technologies.

Unit 1: Foundations of HR Policies

Meaning, need, scope, and objectives of HR policies; concept and structure of HR policy manual; importance and use of policy manuals for employees and employers; steps in designing HR policies; types of HR policies; implementation and communication of HR policies; role of HR policies in organizational effectiveness and governance; introduction to employee experience and policy transparency. (8)

Unit 2: HR Policy Design and Implementation

Analysing organizational needs; alignment with vision, mission, and values; principles of effective HR policy design; factors affecting policy formulation including cultural, legal,

social, and economic aspects; best practices in HR policy development; drafting, writing, and communicating HR policies; policy digitization and use of HR technology platforms. (8+2)

Unit 3: HR Policies in Indian Context

Designing recruitment and selection policies; compensation and benefits policies; training and development policies; performance appraisal policies; career advancement and succession policies; employee conduct, discipline, and grievance handling; diversity, equity, and inclusion (DEI) policies; employee wellness and mental health policies; data protection and confidentiality policies; compliance with Indian labour laws and emerging labour codes. (8)

Unit 4: Global HR Policy Frameworks

Principles of global HR policy design; cross-cultural considerations; global talent management and expatriate policies; role of HR technology and digital platforms in global policy implementation; data privacy frameworks (e.g., GDPR concepts); managing remote and hybrid workforce policies; ethical considerations in global HR practices. (8+2)

Unit 5: Case Studies and Emerging Trends

Case studies of HR policy design and implementation in Indian and global organizations; best practices in policy governance and compliance; emerging trends including gig workforce policies, flexible work arrangements, ESG-linked HR policies, AI-driven HR policy management, employee experience and engagement-focused policies. (8+1)

Note:

1. Students should engage in drafting HR policies, policy manuals, and case analysis.
2. Real-world case studies and industry examples should be incorporated.

Suggested Text Books:

1. John H. McConnell, How to Develop Essential HR Policies and Procedures, AMACOM.
2. Dipak Kumar Bhattacharyya, Human Resource Management, Sage Publications.
3. Gary Dessler, Human Resource Management, Pearson Education..

Suggested Reference Books:

1. Carol L. Barbeito, Human Resource Policies and Procedures for Nonprofit Organizations, John Wiley & Sons.
2. Marlene De Koning, HR Tech Strategy: Revolutionizing Employee Experience Through HR-Tech Synergy.
3. S. D. Puri, Guide on Labour & Human Resources Management Forms and Precedents, Snow White Publications.
4. Jennifer Saltz Bullock & Jeff O'Connell, Florida Employment Law Manual. Richard I. Henderson, Compensation Management in a Knowledge-Based World, Pearson Education.

Suggested e-resources:

1. Ministry of Labour and Employment <https://labour.gov.in>
2. Society for Human Resource Management <https://www.shrm.org>
3. HRHelpBoard <https://www.hrhelpboard.com/hr-policies.html>
4. International Labour Organization <https://www.ilo.org>
5. Webtel Electrosoft <https://webtel.in>

Semester: IV	R25-MBA-SEC-411HRM	Employee Engagement and Development
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objective:

1. To develop an understanding of the concepts, models, and importance of employee engagement and employee ownership.
2. To familiarize learners with psychological and organizational factors influencing employee engagement and development.
3. To enable learners to design and implement employee engagement initiatives aligned with organizational goals.
4. To build competence in measuring employee engagement using modern tools, metrics, and analytics.
5. To enhance understanding of the role of employee ownership, job design, and organizational culture in improving engagement and performance.
6. To develop the ability to design comprehensive employee engagement and development plans incorporating contemporary workplace trends.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive abilities	Course outcomes
411HRM.1	Remembering	Identify concepts, models, and dimensions of employee engagement and employee ownership.
411HRM.2	Understanding	Explain factors, theories, and drivers influencing employee engagement and development.
411HRM.3	Applying	Apply tools and metrics to measure employee engagement in various organizational contexts.
411HRM.4	Analysing	Analyze the impact of employee ownership and engagement on productivity and commitment.
411HRM.5	Evaluating	Evaluate engagement practices and models using real-world metrics and frameworks..
411HRM.6	Creating	Design employee engagement and development strategies aligned with organizational goals..

Unit 1: Foundations of Employee Engagement -Concept, evolution, definition, need, and importance of employee engagement; factors influencing engagement; advantages of engaged workforce; engagement models including the Gallup Q12 Model and Aon Hewitt model; concept of employee ownership; types such as ESOPs, stock options, and cooperatives; relationship with productivity and organizational commitment. (8)

Unit 2: Designing Engagement and Development-Understanding Self-Determination Theory and its application in HRM; role of autonomy, competence, and relatedness; designing engagement initiatives—job role clarity, communication, leadership, and culture;

levels of engagement; building engagement culture; barriers such as ineffective leadership, communication gaps, and workplace frustration; integration of employee development and learning culture. (8+2)

Unit 3: Measuring Employee Engagement -Stages and methods of measuring engagement; tools and techniques; steps in effective measurement; challenges and myths; key metrics including feedback, satisfaction, leadership relations, career growth, rewards, and alignment; advanced indicators such as Manager Effectiveness Index and Belonging Index; introduction to engagement analytics. (8)

Unit 4: Employee Ownership and Organizational Outcomes-Concept, significance, and traits of employee ownership; impact on productivity, retention, and organizational commitment; relationship with Organizational Citizenship Behaviour (OCB); role of ownership in enhancing accountability and performance. (8+2)

Unit 5: Applications and Contemporary Practices -Application of engagement through job design, role autonomy, and discretionary behaviour; engagement strategies across sectors; practices in organizations such as Infosys and Google; engagement in remote, hybrid, and gig workforce; use of digital tools, AI, and HR analytics; development of employee engagement and development plans (practical approach) (8+1)

Note: Students should undertake projects on engagement survey design, case studies, and engagement plan development.

Suggested Text Books:

1. Paul L. Marciano, Carrots and Sticks Don't Work: Build a Culture of Employee Engagement, McGraw Hill.
2. Scott Carbonara, Manager's Guide to Employee Engagement, McGraw Hill.
3. Emma Bridger, Employee Engagement: A Practical Introduction, Kogan Page.

Suggested Reference Books:

1. Bob Kelleher, Employee Engagement for Dummies, John Wiley & Sons.
2. Robert Postlethwaite & Jeremy Gadd, The Employee Ownership Manual, Spiramus Press.

Suggested e-resources:

1. Gallup <https://www.gallup.com>
2. Society for Human Resource Management <https://www.shrm.org>
3. Officevibe <https://officevibe.com>
4. Achievers Workforce Institute <https://www.achievers.com>

Operations & Supply Chain Management Specialization

(Semester-IV)

Semester -IV	R25-MBA-SCC-406OSCM	Quality Manufacturing Standards
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Core Course -Compulsory

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
406OSCM.1	Remembering	DESCRIBE the concepts and overview of Quality Management.
406OSCM.2	Understanding	EXPLAIN the key considerations in Quality Management
406OSCM.3	Applying	ILLUSTRATE the use of the concepts and principles of Quality Management & development
406OSCM.4	Analysing	EXAMINE the practical layouts in real world in light of the theoretical concepts and principles of Quality Management.
406OSCM.5	Evaluating	EVALUATE various approaches to Quality Management.
406OSCM.6	Creating	Create solution oriented quality technique

UNIT 1. Introduction to Quality control:Meaning & concept of quality, Quality control-steps in quality control, objectives/purpose of quality control, importance of quality control, functions of quality control, cost of quality, effects of poor quality, quality of design, quality of performance, conformance, specifications of quality, quality policy, contents of quality policy. (8)

UNIT 2. Quality circle & TQM:Quality circle concept, benefits of quality circle, organization for quality circle, working of quality circle, technique of quality circle to solve problems- brain storming, data collection, Ishikawa diagram, Pareto analysis. (8+2)

UNIT 3. Total Quality Management:Concept of TQM, Objectives of a TQM system, areas of TQM system, Dr. Demings & Crosbys 14 point so f TQM, Benefits of TQM, Steps in implementing TQM, Tools & Techniques, ISO. (8)

UNIT 4. JIT & Kaizen-Introduction to JIT, Seven Wastes, Benefits of JIT, Characteristics of JIT, Kanban System, Need of Kaizen, Kaizen umbrella, Kaizen & Management, PDCA Cycle, Kaizen the practice, Introduction to BIS, Business Process Reengineering. (8+2)

UNIT 5. Modern Concepts-Cellular manufacturing & Agile Manufacturing, Value Stream Mapping, Six Sigma, Six Sigma Methodology, Benchmarking- Procedure, Types of Benchmarking, data collection, benefits of Benchmarking, Pokayoke Concept & Devices. (8+1)

Suggested Text Books:

7. Industrial Engineering & Production & Operations Management, Sanjay Patil, Nandkumar Hukeri, Electrotech Publication
8. Industrial Engineering & Production Management, Martand Telsang, S. Chand
9. Operations Management Theory & Practice, B. Mahadevan, Pearson.
10. Production and Operations Management, R B Khanna, PHI, New Delhi.
11. Production & Operations Management, S N Chary, McGraw Hill.
12. Supply Chain Management - Strategy, Planning & Operation, Sunil Chopra, Peter Meindl, D. V. Kalra, Pearson Education.

Suggested Reference Books:

4. Supply Chain Logistics Management, Donald Bowersox, David Closs, M Bixby Cooper, Tata McGraw Hill.
5. Operations Management, William J. Stevenson, TMGH.
6. Operations Management, Lee Krajewski, Larry Ritzman, Manoj Malhotra, Pearson Education.

Semester -IV	R25-MBA-SEC-407OSCM	Production Planning and Control
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
407OSCM.1	Remembering	DESCRIBE the concepts and overview of Production Planning.
407OSCM.2	Understanding	EXPLAIN the key considerations in Production Planning & Control
407OSCM.3	Applying	ILLUSTRATE the use of the concepts and principles of Production Planning & Control
407OSCM.4	Analysing	EXAMINE the practical layouts in real world in light of the theoretical concepts and principles of Production Planning & Control.
407OSCM.5	Evaluating	EVALUATE various approaches to Production Planning & Control
407OSCM.6	Creating	Create MPS for manufacturing systems

UNIT 1. Introduction: Production Planning & Control, Objectives of PPC, Functions of PPC, Factors determining PPC, Difference between Production Planning & Production Control, Coordination of PPC with other departments. Sales Forecasting, Need of forecasting, Forecasting Methods. (8)

UNIT 2. Production Planning: Levels of Planning, Objectives of Planning, Information required for production planning, production cycle, production order, **Capacity:** concept, capacity measurement, capacity planning procedure, Aggregate planning, Introduction to Master Production Schedule (MPS), Functions of MPS. (8+2)

UNIT 3. Routing (Process Planning) & MRP: Introduction, Advantages of routing, information required for process planning, factors influencing process planning, MRP: Techniques in material planning, Bill of material, Bill of material types. (8)

UNIT 4. Scheduling & Loading: Scheduling, Objectives of scheduling, sequence/procedure of loading, scheduling devices, ways of reducing scheduling problems, loading devices, Introduction to Scheduling & loading techniques. (8+2)

UNIT 5. Production Control: Introduction, Objectives of production control, dispatching, functions of dispatching, documents in dispatching, progressing or follow up, functions of progressing, Evaluation, Need and advantages. (8+1)

Suggested Text Books:

1. Industrial Engineering & Production & Operations Management, Sanjay Patil, Nandkumar Hukeri, Electrotech Publication
2. Industrial Engineering & Production Management, Martand Telsang, S. Chand
3. Operations Management Theory & Practice, B. Mahadevan, Pearson.
4. Production and Operations Management, R B Khanna, PHI, New Delhi.
5. Production & Operations Management, S N Chary, McGraw Hill.
6. Supply Chain Management - Strategy, Planning & Operation, Sunil Chopra, Peter Meindl, D. V. Kalra, Pearson Education.

Suggested Reference Books:

1. Supply Chain Logistics Management, Donald Bowersox, David Closs, M Bixby Cooper, Tata McGraw Hill.
2. Operations Management, William J. Stevenson, TMGH.
3. Operations Management, Lee Krajewski, Larry Ritzman, Manoj Malhotra, Pearson Education.

Semester - IV	R25-MBA-SEC-408OSCM	Services Operations Management
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
408OSCM.1	Remembering	DESCRIBE the nature and CHARACTERISTICS of services and the services economy.
408OSCM.2	Understanding	DESCRIBE the service design elements of variety of services.
408OSCM.3	Applying	USE service blueprinting for mapping variety of real-life service processes.
408OSCM.4	Analysing	ANALYSE alternative locations and sites for variety of service facilities.
408OSCM.5	Evaluating	JUDGE and EXPLAIN the service orientation at variety of service facilities / organizations.
408OSCM.6	Creating	CREATE flow process layouts for variety of services.

UNIT 1. Understanding Services:

The Service Economy, Service Definitions, Facilitating Role of Services in an Economy, Economic Evolution, Stages of Economic Development, Nature of the Service Sector, The Experience Economy, Consumer Service Experience, Business Service Experience, Service-Dominant Logic, Distinctive Characteristics of Service Operations - Customer Participation, Simultaneity, Perishability, Intangibility, Heterogeneity, Non-transferrable Ownership. The Service Package, Grouping Services by Delivery Process, Open-Systems View of Service Operations Management. (8)

UNIT 2. Designing the Service Enterprise:

New Service Development, Sources of Service Sector Growth, Information Technology, The Internet as a Service Enabler, Innovation, Changing Demographics, Innovation in Services, New Service Development, Technology in Service Innovation, Challenges of Adopting New Technology in Services, Readiness to Embrace New Technology, Service Design Elements, Customer Value Equation, Strategic Positioning through Process Structure, Service Blueprinting, Taxonomy for Service Process Design, Degree of Divergence, Object of the Service Process, Type of Customer Contact, Generic Approaches to Service System Design, Production-Line Approach, Customer as Co-producer, Customer Contact Approach, Information Empowerment, Intellectual Property. (8+2)

UNIT 3. The Service Encounter:

Concept of the Service Encounter, Role of Technology, The Emergence of Self-Service, The Service Encounter Triad, Encounter Dominated by the Service Organization, Contact Personnel Dominated Encounter, Customer-Dominated Encounter, The Service Organization,

Culture, Empowerment, Control Systems, Customer Relationship Management, Contact Personnel- Selection & Training, Creating an Ethical Climate. The Customer Expectations and Attitudes, The Role of Scripts in Coproduction, Creating a Customer Service Orientation, Service Profit Chain. (8)

UNIT 4. Service Facility Location:

Strategic Location Considerations, Competitive Clustering, Saturation Marketing, Marketing Intermediaries, Substitution of Communication for Travel, Separation of Front from Back Office, Impact of the Internet on Service Location, Site Considerations, Geographic Information Systems, Facility Location Modeling Considerations, Geographic Representation, Number of Facilities, Optimization Criteria, Facility Location Techniques, Cross-Median Approach for a Single Facility, Huff Model for a Retail Outlet, Location Set Covering for Multiple Facilities, Regression Analysis in Location Decisions. (8+2)

UNIT 5. Service Facility and Process Flows:

Environmental Psychology and Orientation, Service scopes, Behaviors in Service scopes, Environmental Dimensions of Service scopes, Facility Design, Nature and Objectives of Service Organizations, Land Availability and Space Requirements, Flexibility, Security, Aesthetic Factors, The Community and Environment. Process Analysis, Types of Processes, Flowcharting, Gantt Chart, Process Terminology, Facility Layout, Flow Process Layout and the Work Allocation Problem, Job Shop Process Layout and the Relative Location Problem. (8+1)

Suggested Text Books:

1. Successful Service Operations Management, Metter, King–Mettters, Pulliman& Walton, Thomson India
2. Service Management, Fitzsimmons and Fitzsimmons, Irwin/McGraw-Hill
3. Services Marketing Operations and Management, Vinnie J Juhari, Kirti Dutta, Oxford University Press
4. Services Sector Management An Indian Perspective, C. Bhattacharjee
5. Services Business Management, Dr. Abhay Kulkarni, Himalaya Publication.

Suggested Reference Books:

1. Service operations management-Improving service delivery, Robert Johnston, Graham Clark, Pearson Publication
2. Baldrige – Just What the Doctor Ordered, Quality Progress, Nelson
3. Services Business Management -Dr. Abhay Kulkarni, Dr. Sudhir Hasamnis (Himalaya Publishing House)

Semester -IV	R25-MBA-SEC-409OSCM	Manufacturing Resources Planning
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
409OSCM.1	Remembering	DEFINE basic terms and concepts related to MRP II.
409OSCM.2	Understanding	DESCRIBE the integrated planning structure and functions incorporated within MRP.
409OSCM.3	Applying	ILLUSRATE the importance of MRP as top-management planning tool
409OSCM.4	Analysing	IDENTIFY the vertical and horizontal cross-functional integration within the MRP II planning hierarchy.
409OSCM.5	Evaluating	EXPLAIN how what-if simulation, modeling, and analysis are used to produce feasible plans.
409OSCM.6	Creating	DISCUSS how MRP supports the company's cost, quality, and delivery operating objectives.

UNIT 1. Master Production Scheduling (MPS): Introduction to MPS, Need, objectives & functions of MPS, Role of MPS in management- as a “Link between strategic and tactical planning”. Logical flow of materials in different manufacturing scenarios (VAT Analysis), Planning horizons and Time periods (Buckets) of MPS, Order management in MPS, Safety and hedges, Projected Available Balance (PAB) and Available To Promise (ATP), Time Fences & effect of changing MPS decisions on time fences, Final Assembly Schedule (FAS). (8)

UNIT 2. Material Requirements Planning (MRP-I): Introduction to MRP-I, Roles & functions of MRP-I, Independent & Dependent Demand, Bill of Materials (BOM), Types of BOM, Numerical Problems on BOM, Lot-sizing, MRP-I as Input & Output Process, MRP-I Spreadsheet problem, Pegging reports & where-used files. (8+2)

UNIT 3. Capacity Management: Introduction to ‘Capacity’ and ‘Capacity management’, Capacity Expansion Strategies, Capacity Planning levels vis-à-vis Manufacturing planning levels, Capacity measurement, Rough Cut Capacity Planning (RCCP), Capacity Requirement Planning (CRP), Shop Calendar, Scheduling strategies- Backward & Forward scheduling, Infinite & Finite loading, Production smoothing policies. (8)

UNIT 4. Manufacturing Resource Planning (MRP-II)- (Module-I): Introduction to MRPII, Roles & functions of MRPII, MRP-II framework, Information flow in MRP-II, Relation of MRP-II with Demand management and Capacity management, Manufacturing calendar. (8+2)

UNIT 5. Manufacturing Resource Planning (MRP-II)- (Module-II): Transition from MRP-I to MRP-II, Closed loop MRP, Comparison between MRP-I and MRP-II, Plant & supplier scheduling, Problems associated with MRP-II, Benefits and prospects of MRP-II, Compatibility between MRP-II & Just-in-Time (JIT). (8+1)

Suggested Text Books:

1. Manufacturing Resource Planning System, Mr. Oliver W.Wight
2. Manufacturing Resource Planning , Mr. Khalid Shaikh,
3. Manufacturing Resource Planning System, S. M. Emberly

Suggested Reference Books:

1. Operations Management by Terry Hill, Palgrave
2. The fundamentals of Production Planning and Control by Stephen Chapman, Pearson

Semester -IV	R25-MBA-SEC-410OSCM	Productivity Management
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
410OSCM.1	Remembering	DEFINE various types of productivity and measures of productivity.
410OSCM.2	Understanding	DEMONSTRATE linkages between various measures of productivity.
410OSCM.3	Applying	APPLY Value Analysis and Value Engineering principles to simple Situations related to operations management.
410OSCM.4	Analysing	APPLY various types of charts & diagrams to carry out work study & method study.
410OSCM.5	Evaluating	DETERMINE the Standard Time using Techniques of Work Measurement.
410OSCM.6	Creating	ELABORATE upon the concepts of JIT, Lean, 5S, TPM, BPR, Six Sigma, World Class manufacturing.

UNIT 1. Productivity Management:

Definition, Concept and Importance of productivity, Difference between Production and Productivity, Tools of productivity, Reasons for low productivity, Factors that help increasing productivity, Productivity index, Kinds of productivity measurement, Causes of low productivity and techniques of their elimination, Factors affecting productivity, Technical methods to improve productivity, Main contributors to productivity improvement, Advantages from increased productivity. (8)

UNIT 2. Value Analysis and Value Engineering:

Introduction, Definition, history of value analysis, meaning of value, objectives of value analysis, use of value analysis, reason of unnecessary cost, value analysis procedure, value engineering job plan/Phases of value analysis. (8+2)

UNIT 3. Work Study & Method Study: Meaning & definition of work study, Objectives, Advantages, importance, work study procedure, correlation of work study with work simplification, human relations, management, supervisors, workers, work study man, concept of work content, **Method Study** –Definition, objectives, scope, basic procedure, Method study symbols & recording of facts. (8)

UNIT 4. Work Measurement:

Definition, objectives of work measurement, techniques, Time study, time study procedure, Methods of time study, Performance rating, Allowances, work sampling, need of work sampling, work sampling advantages over time study, applications of work sampling. (8+2)

UNIT 5. Advanced Methods of Productivity and service level enhancements:

Overview of JIT, Lean, 5S, TPM, BPR, Six Sigma, World Class manufacturing, Use of Technology in productivity and service enhancements: ITeS, CAD, CAM, contemporary issues in productivity, Activities of National Productivity Council and other organizations, Productivity Scenario and changes. (8+1)

Suggested Text Books:

1. Industrial Engineering & Production & Operations Management, Sanjay Patil, Nandkumar Hukeri, Electrotech Publication
2. Industry 4.0: Managing The Digital Transformation, Ustundag, Alp, Cevikcan, Emre, Springer.
3. Hands-On Industrial Internet of Things: Create a powerful Industrial IoT infrastructure using Industry 4.0 , Giacomo Veneri.

Reference Books:

1. Internet of Things: A Hands-On Approach , Arsheep Bahga.
2. Industry 4.0: The Industrial Internet of Things Paperback, Alasdair Gilchrist.

Semester -IV	R25-MBA-SEC-411OSCM	Inventory Control Management
3 Credits	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
411OSCM.1	Remembering	DESCRIBE the key concepts of Inventory Management and the driving forces.
411OSCM.2	Understanding	EXPLAIN the structure of modern-day Inventory Management.
41 OSCM.3	Applying	IDENTIFY the various flows in real world Inventory Management.
411OSCM.4	Analysing	COMPARE and CONTRAST push and pull strategies in materials Management
411OSCM.5	Evaluating	EXPLAIN the key Operational Aspects in Inventory Management.
411OSCM.6	Creating	DISCUSS the relationship between manufacturing and Inventory Management

UNIT 1. Materials Management: Definition & concept, objectives, Importance of materials management, Functions of materials management, duties of materials manager, organization of materials management department, Integrated materials management, material cycle, **Make or buy decision:** Meaning, factors to be considered in make or buy decision, functional aspects of make or buy decision. (8)

UNIT 2. Purchasing- Definition & concept, objectives of purchasing, Importance, functions of purchasing, structure of purchasing organization, **Scientific Purchasing-** Meaning, objectives, scientific purchasing principles of raw material, scientific purchasing procedure, purchasing or buying methods, centralized purchasing, vendor selection & rating, evaluation of purchase performance. (8+2)

UNIT 3. Inventory Control: Definition of Inventory & Inventory control, characteristics of Inventory, objectives or importance of Inventory control, limitations of Inventory control, components of Inventory, types of inventory, Inventory cost relationship, cost associated with inventory, quantity standards/ levels of inventory control, Basic EOQ, Selective Inventory management, ABC analysis, ABC advantages & limitations. (8)

UNIT 4. Material Handling: Introduction, necessity or significance of materials handling, objectives, symptoms of poor material handling, principles of materials handling, types of material handling equipment, selection of material handling equipment, concept of unit load, concept of containerization & palletization. (8+2)

UNIT 5. Store Keeping & Maintenance Management: Introduction, functions of store keeping, duties of the store keeper, store location, types of store location, store layout, record keeping, physical verification of materials, Introduction to Maintenance Management: objectives, functions of maintenance management, maintenance system- Breakdown maintenance, Predictive maintenance, Preventive maintenance, Schedule maintenance. (8+1)

Suggested Text Books:

1. Industrial Engineering & Production & Operations Management, Sanjay Patil, Nandkumar Hukeri, Electrotech Publication
2. Industrial Engineering & Production Management, Martand Telsang, S. Chand
3. Operations Management Theory & Practice, B. Mahadevan, Pearson.
4. Production and Operations Management, R B Khanna, PHI, New Delhi.

Reference Books:

1. Supply Chain Management Process, System & Practice, N.Chadrasedkaran, Oxford
2. Total Supply Chain Management, Basu & Wright, Elsevier
3. Logistics Management & Strategy, Harrison and van Hoek, Prentice Hall
4. Supply Chain Management, Mentzer, Response Books.
5. Logistics Management: The Supply Chain Imperative, Vindo Sople, Pearson Education.

Data Science & Business Analytics Management Specialization

(Semester-IV)

Semester: IV	R25-MBA-SCC-406DSBA	Big Data Analytics
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Core Course- Compulsory

Course Objectives:

1. Understand the architecture and ecosystem of big data platforms.
2. Analyze large structured and unstructured datasets for business insights.
3. Apply distributed data processing frameworks such as Apache Hadoop and Apache Spark.
4. Evaluate real-time analytics solutions for managerial decision-making.
5. Design scalable big data solutions aligned with business strategy.
6. Develop and implement end-to-end big data analytics pipelines using modern tools and technologies.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
406DSBA.1	Remembering	Explain the big data ecosystem, architecture, and characteristics
406DSBA.2	Understanding	Interpret distributed computing models and data processing frameworks
406DSBA.3	Applying	Use big data tools for large-scale data analysis
406DSBA.4	Analyzing	Analyze streaming and batch analytics models
406DSBA.5	Evaluating	Evaluate big data implementation challenges and governance issues
406DSBA.6	Creating	Design scalable big data analytics pipelines for enterprise applications

Unit 1: Big Data Foundations and Ecosystem

Evolution from traditional BI to Big Data, Characteristics of Big Data (5V model), Big Data architecture, Big Data lifecycle and analytics pipeline, Industry use cases (Retail, Finance, Healthcare) (8)

Unit 2: Big Data Storage and Processing Frameworks

Distributed computing fundamentals, Hadoop ecosystem overview, HDFS architecture, Map Reduce programming model, Apache Spark ecosystem, Data lakes vs data warehouses (8+2)

Unit 3: Data Processing and Stream Analytics

Batch vs real-time processing, Apache Kafka fundamentals, Spark Streaming concepts, Event-driven architecture, Business applications in operations monitoring and fraud detection (8)

Unit 4: Big Data Analytics Techniques

Predictive analytics with large datasets, Recommendation systems, Graph analytics and network analysis, Text analytics for big data, Integrating machine learning with big data platforms (8+2)

Unit 5: Big Data Governance, Ethics and Strategy

Data governance frameworks, Privacy regulations and compliance, Data security in distributed environments, Cost management in cloud big data systems, Future trends: Data Fabric, Data Mesh (8+1)

Suggested Text Books

1. Tom White – Hadoop: The Definitive Guide
2. Seema Acharya – Big Data Analytics

Suggested Reference Books:

1. Viktor Mayer-Schonberger – Big Data: A Revolution

Suggested E-Resources

1. <https://www.coursera.org>

Semester: IV	R25-MBA-SEC-407DSBA	Data Mining
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objectives:

1. To provide a strong foundation in data mining concepts, architectures, and preprocessing techniques.
2. To develop competency in applying classification, clustering, association, and prediction techniques for business decision-making.
3. To enable learners to analyze structured and semi-structured data using modern data mining tools.
4. To evaluate model performance and interpret patterns for managerial insights.
5. To design practical data mining solutions for real-world business applications.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
407DSBA.1	Remembering	Define key concepts, architectures, and processes of data mining and knowledge discovery.
407DSBA.2	Understanding	Explain various data preprocessing, classification, clustering, and association techniques.
407DSBA.3	Applying	Apply data mining algorithms to discover patterns and relationships in business datasets.
407DSBA.4	Analyzing	Analyze data mining results to interpret trends, anomalies, and predictive insights.
407DSBA.5	Evaluating	Evaluate the effectiveness of different data mining models using performance metrics.
407DSBA.6	Creating	Design and develop data mining models for solving real-world business problems.

Unit 1 – Introduction to Data Mining & Preprocessing

Introduction to Data Mining: Definition, Evolution, and KDD Process. Data Mining Architecture and Components. Types of Data: Structured, Semi-Structured, and Unstructured. Data Preprocessing: Data Cleaning, Integration, Transformation, Reduction. Data Warehousing and OLAP Concepts in Data Mining. Data Visualization for pattern identification. (8)

Unit 2 – Classification & Prediction Techniques

Supervised Learning Overview. Decision Trees (ID3, C4.5, CART). Naïve Bayes Classifier. k-Nearest Neighbor (k-NN). Logistic Regression. Model Evaluation: Confusion Matrix, Accuracy, Precision, Recall, F1-Score, ROC Curve. Cross-validation Techniques. (8+2)

Unit 3 – Clustering & Association Rule Mining

Unsupervised Learning Overview. Clustering Techniques: k-Means, Hierarchical Clustering, DBSCAN. Cluster Evaluation Methods. Association Rule Mining: Market Basket Analysis. Apriori Algorithm and FP-Growth Algorithm. Interestingness Measures: Support, Confidence, Lift. (8)

Unit 4 – Advanced Data Mining & Text Mining

Outlier Detection Techniques. Ensemble Methods: Random Forest, Boosting (Introductory). Neural Networks Basics for Data Mining. Text Mining: Text preprocessing, TF-IDF, Sentiment Analysis basics. Web Mining: Web Content, Structure, and Usage Mining. Ethical Issues in Data Mining and Privacy Concerns. (8+2)

Unit 5 – Business Applications & Emerging Trends

Data Mining in Finance (Credit Scoring, Fraud Detection). Data Mining in Marketing (Customer Segmentation, Recommendation Systems). Data Mining in Healthcare and Supply Chain. Big Data Integration with Data Mining. Introduction to AI-driven Data Mining and AutoML. Mini Case Study Discussion and Model Interpretation. (8+1)

Suggested Text Books:

1. Jiawei Han, Micheline Kamber & Jian Pei – *Data Mining: Concepts and Techniques*
2. Pang-Ning Tan, Michael Steinbach & Vipin Kumar – *Introduction to Data Mining*
3. Galit Shmueli, Nitin Patel & Peter Bruce – *Data Mining for Business Analytics*

Suggested Reference Books:

1. Trevor Hastie, Robert Tibshirani & Jerome Friedman – *The Elements of Statistical Learning*
2. Ian Witten, Eibe Frank & Mark Hall – *Data Mining: Practical Machine Learning Tools and Techniques*
3. Mehmed Kantardzic – *Data Mining: Concepts, Models, Methods, and Algorithms*

Suggested E-Resources

2. <https://www.coursera.org>
3. <https://www.edx.org>
4. <https://swayam.gov.in>
5. <https://www.mygreatlearning.com/academy>

Semester: IV	R25-MBA-SEC-408DSBA	Financial Analytics
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objectives:

1. To develop analytical skills for financial data interpretation and strategic decision-making.
2. To apply statistical and predictive models in financial forecasting and risk analysis.
3. To enable learners to analyze financial statements and market data using quantitative tools.
4. To evaluate investment decisions using portfolio and risk-return models.
5. To design financial analytics solutions for corporate and investment environments.
6. To develop and implement data-driven financial analytics models using tools such as Microsoft Excel and Python for real-world financial decision-making.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
408DSBA.1	Remembering	Define core concepts of financial analytics, financial ratios, risk-return principles, and market indicators.
408DSBA.2	Understanding	Explain financial statement analysis, time value of money, and portfolio theory concepts.
408DSBA.3	Applying	Apply statistical and regression models for financial forecasting and valuation.
408DSBA.4	Analyzing	Analyze financial data to assess profitability, liquidity, risk exposure, and investment performance.
408DSBA.5	Evaluating	Evaluate investment alternatives and risk management strategies using financial models.
408DSBA.6	Creating	Design data-driven financial analytics models for corporate finance and investment decision-making.

Unit 1 – Foundations of Financial Analytics

Introduction to Financial Analytics and its role in business strategy. Overview of Financial Markets and Instruments (Equity, Debt, Derivatives). Financial Statements: Income Statement, Balance Sheet, Cash Flow Statement. Ratio Analysis: Liquidity, Profitability, Solvency, Efficiency Ratios. Time Value of Money (NPV, IRR, Discounting Techniques). Introduction to Financial Data Sources and Tools (Excel/Python basics).
(8)

Unit 2 – Statistical & Predictive Techniques in Finance

Descriptive and Inferential Statistics for Financial Data. Probability Distributions in Finance (Normal Distribution, Log Returns). Correlation and Covariance in Financial

Markets. Regression Analysis for Financial Forecasting. Time Series Analysis: Trend, Seasonality, Moving Averages. Financial Forecasting Models and Interpretation. (8+2)

Unit 3 – Risk Analytics & Portfolio Management

Risk and Return Concepts. Systematic and Unsystematic Risk. Portfolio Theory: Markowitz Model. Capital Asset Pricing Model (CAPM). Beta and Security Market Line. Value at Risk (VaR) and Risk Measurement Techniques. (8)

Unit 4 – Investment Analytics & Corporate Finance

Stock Valuation Models (Dividend Discount Model, P/E Analysis). Bond Valuation and Yield Measures. Capital Budgeting Decisions. Cost of Capital and Weighted Average Cost of Capital (WACC). Financial Modeling using Excel/Python. Fraud Detection and Financial Anomaly Detection basics. (8+2)

Unit 5 – Financial Technology (FinTech) & Emerging Trends

Introduction to FinTech and Digital Finance. Algorithmic Trading Basics. AI Applications in Finance. Blockchain Applications in Financial Systems. Credit Scoring and Predictive Analytics. Case Study: Financial Analytics for Strategic Decision-Making. (8+1)

Suggested Text Books:

1. Simon Benninga – *Financial Modeling*
2. John C. Hull – *Risk Management and Financial Institutions*
3. James R. Evans – *Business Analytics*

Suggested Reference Books:

1. Frank J. Fabozzi – *Handbook of Financial Analysis*
2. Stephen A. Ross, Randolph Westerfield & Jeffrey Jaffe – *Corporate Finance*
3. Philippe Jorion – *Value at Risk*

Suggested E-Resources:

1. <https://www.coursera.org>
2. <https://swayam.gov.in>
3. <https://www.mygreatlearning.com/academy>
4. <https://alison.com>

Semester: IV	R25-MBA-SEC-409DSBA	Business Analytics using Python
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objectives:

1. To develop programming proficiency in Python for business analytics applications.
2. To apply data preprocessing, visualization, and statistical analysis techniques using Python libraries.
3. To implement predictive and prescriptive analytics models for business decision-making.
4. To analyze structured and unstructured datasets for extracting actionable insights.
5. To design end-to-end business analytics solutions using Python-based tools.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
409DSBA.1	Remembering	Recall Python fundamentals, data structures, and core analytical libraries used in business analytics.
409DSBA.2	Understanding	Explain data preprocessing workflows, visualization principles, and statistical modeling concepts using Python.
409DSBA.3	Applying	Apply Python libraries to perform data cleaning, visualization, regression, classification, and clustering tasks.
409DSBA.4	Analyzing	Analyze business datasets to identify patterns, correlations, trends, and predictive insights.
409DSBA.5	Evaluating	Evaluate machine learning models and interpret results for strategic business decisions.
409DSBA.6	Creating	Design and develop end-to-end Python-based business analytics solutions for real-world case scenarios.

Unit 1 – Python Foundations for Business Analytics- Introduction to Python for Data Analytics. Python Environment Setup (Anaconda, Jupyter Notebook). Data Types, Variables, Operators, and Control Structures. Functions, Modules, and Packages. NumPy for Numerical Computing. Pandas for Data Manipulation (DataFrames, Indexing, Filtering, Aggregation). (8)

Unit 2 – Data Preprocessing & Visualization- Data Cleaning: Handling Missing Values, Outliers, Data Transformation. Exploratory Data Analysis (EDA). Data Aggregation and Group Operations. Data Visualization using Matplotlib and Seaborn. Interactive Visualizations using Plotly (Introduction). Business Case: Sales and Customer Data Analysis using Python. (8+2)

Unit 3 – Statistical & Predictive Analytics- Descriptive and Inferential Statistics using Python. Probability Distributions and Hypothesis Testing. Correlation and Covariance Analysis. Linear and Multiple Regression using scikit-learn. Logistic Regression for Classification Problems. Model Evaluation Metrics (Accuracy, Precision, Recall, F1-Score, ROC-AUC). (8)

Unit 4 – Machine Learning & Advanced Analytics- Decision Trees and Random Forest. k-Nearest Neighbor (k-NN). Clustering (k-Means, Hierarchical Clustering). Time Series Analysis and Forecasting. Feature Selection and Dimensionality Reduction (PCA). Introduction to NLP for Business Text Analytics. (8+2)

Unit 5 – Business Applications & Capstone Case- Customer Segmentation and Market Basket Analysis. Churn Prediction Model. Financial Forecasting Case. Dashboard Creation using Python (Plotly/Dash basic introduction). Deployment Overview: Model Export and Reporting. Mini Capstone Project Discussion and Model Interpretation. (8+1)

Suggested Text Books

1. McKinney, Wes. Python for Data Analysis (O'Reilly Media).
2. Géron, Aurélien. Hands-On Machine Learning with Scikit-Learn, Keras and TensorFlow (O'Reilly Media).
3. Jake VanderPlas. Python Data Science Handbook (O'Reilly Media).

Suggested Reference Books

1. Downey, Allen B. Think Python: How to Think Like a Computer Scientist (O'Reilly).
2. Joel Grus. Data Science from Scratch: First Principles with Python (O'Reilly).
3. Wes McKinney. Pandas for Everyone: Python Data Analysis (Addison-Wesley).
4. Bradley Boehmke and Brandon Greenwell. Hands-On Machine Learning with R and Python (CRC Press).
5. Aurélien Géron – *Hands-On Machine Learning with Scikit-Learn, Keras & TensorFlow*
6. Trevor Hastie, Robert Tibshirani & Jerome Friedman – *The Elements of Statistical Learning*
7. Allen B. Downey – *Think Stats*

Suggested E-Resources

1. <https://www.python.org/doc/>
2. <https://www.kaggle.com/learn/python>
3. <https://nptel.ac.in/courses/106/106/106106212/> (Programming with Python)

Semester: IV	R25-MBA-SEC-410DSBA	AI for Business
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objectives:

1. To introduce fundamental concepts of Artificial Intelligence (AI) and its strategic relevance in business environments.
2. To enable learners to understand AI-driven decision systems, automation, and predictive intelligence.
3. To apply machine learning, NLP, and intelligent systems for solving real-world business problems.
4. To analyze AI adoption challenges including ethics, governance, and organizational transformation.
5. To design AI-enabled business solutions aligned with enterprise strategy.
6. To develop and implement AI-based models and frameworks for real-world business applications and decision-making.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
410DSBA.1	Remembering	Define core concepts of Artificial Intelligence, Machine Learning, Deep Learning, and Intelligent Systems in business contexts.
410DSBA.2	Understanding	Explain AI technologies such as NLP, computer vision, automation, and predictive analytics and their business applications.
410DSBA.3	Applying	Apply AI models and tools to solve structured business problems such as forecasting, recommendation, and classification.
410DSBA.4	Analyzing	Analyze organizational readiness, data ecosystems, and AI-driven transformation strategies.
410DSBA.5	Evaluating	Evaluate ethical, governance, risk, and strategic implications of AI implementation in enterprises.
410DSBA.6	Creating	Design AI-based business solutions, strategies, or frameworks for real-world industry use cases.

Unit 1 – Foundations of AI in Business- Introduction to Artificial Intelligence: History, Scope, and Evolution.AI vs Machine Learning vs Deep Learning.AI Technologies Overview: ML, NLP, Computer Vision, Robotics.AI Value Chain and Data Ecosystem.AI in Business Functions: Marketing, Finance, HR, Operations.Introduction to Intelligent Decision Systems.
(8)

Unit 2 – Machine Learning Applications in Business- Supervised and Unsupervised Learning Overview. Regression and Classification in Business Contexts. Recommendation Systems and Personalization. Customer Segmentation and Churn Prediction. Fraud Detection and Risk Analytics. AI Tools and Platforms (Overview of Python-based and Cloud AI tools). (8+2)

Unit 3 – NLP, Automation & Conversational AI- Natural Language Processing (NLP) Fundamentals. Text Analytics and Sentiment Analysis. Chatbots and Virtual Assistants in Business. Robotic Process Automation (RPA) Concepts. AI in Customer Relationship Management (CRM). Case Study: AI-driven Customer Experience Enhancement. (8)

Unit 4 – AI Strategy, Governance & Ethics- AI Strategy Development and Roadmap. Organizational Change Management for AI Adoption. Responsible AI and Ethical Considerations (Bias, Fairness, Transparency). AI Governance Frameworks and Regulatory Issues. Data Privacy, Security, and Compliance. AI Risk Assessment and Mitigation Strategies. (8+2)

Unit 5 – Emerging AI Trends & Business Innovation- Generative AI and Business Applications. AI in Supply Chain and Smart Manufacturing. AI in Financial Services and FinTech. AI for Strategic Decision-Making and Predictive Intelligence. Blockchain and AI Integration Overview. Capstone Case Discussion: Designing an AI-driven Business Model. (8+1)

Suggested Text Books:

1. Bernard Marr – *Artificial Intelligence in Practice*
2. Ajay Agrawal, Joshua Gans & Avi Goldfarb – *Prediction Machines*
3. Stuart Russell & Peter Norvig – *Artificial Intelligence: A Modern Approach*

Suggested Reference Books:

1. Tom Davenport & Rajeev Ronanki – *Working with AI*
2. Andrew Ng – *Machine Learning Yearning*
3. Erik Brynjolfsson & Andrew McAfee – *The Second Machine Age*

Suggested E-Resources:

1. <https://course.elementsofai.com>
2. <https://learn.microsoft.com>
3. <https://skills.google>

Semester: IV	R25-MBA-SEC-411DSBA	Application of Blockchain Technology
Credits: 3	Total Marks: 100 (50 FA + 50 SA)	Special Elective Course

Course Objectives:

1. To introduce foundational concepts of blockchain technology and distributed ledger systems.
2. To understand blockchain architecture, consensus mechanisms, and smart contracts.
3. To examine applications of blockchain in finance, supply chain, governance, and business ecosystems.
4. To evaluate legal, ethical, security, and regulatory aspects of blockchain implementation.
5. To design blockchain-based business use cases and strategic implementation frameworks.

Course outcomes: On successful completion of the course the learner will be able to-

CO	Cognitive Abilities	Course Outcomes
411DSBA.1	Remembering	Define core blockchain concepts including distributed ledger, consensus mechanisms, cryptographic hashing, and smart contracts.
411DSBA.2	Understanding	Explain blockchain architecture, types of blockchains, and transaction validation processes.
411DSBA.3	Applying	Apply blockchain models to solve business problems in finance, supply chain, and digital identity systems.
411DSBA.4	Analyzing	Analyze blockchain networks, consensus algorithms, and security vulnerabilities in enterprise environments.
411DSBA.5	Evaluating	Evaluate blockchain adoption challenges, governance frameworks, and regulatory compliance issues.
411DSBA.6	Creating	Design blockchain-based business solutions or implementation strategies for real-world organizational contexts.

Unit 1- Introduction to Blockchain: Evolution from Bitcoin to Enterprise Blockchain. Distributed Ledger Technology (DLT) Concepts. Cryptographic Hash Functions and Digital Signatures. Structure of a Block and Blockchain Network. Public, Private, and Consortium Blockchains. Blockchain vs Traditional Database Systems (8)

Unit 2- Peer-to-Peer Networks and Node Architecture. Transaction Lifecycle and Validation. Consensus Mechanisms: Proof of Work (PoW), Proof of Stake (PoS), Delegated PoS, Practical Byzantine Fault Tolerance (PBFT). Smart Contracts: Concepts and Applications. Introduction to Ethereum and Hyperledger (Conceptual Overview). Tokenization and Digital Assets. (8+2)

Unit 3- Blockchain in Financial Services (Payments, Cross-border Transactions, DeFi basics). Blockchain in Supply Chain Management (Traceability and Transparency). Blockchain in Healthcare and Digital Identity. Blockchain in Real Estate and Asset Management. Integration of Blockchain with IoT and AI. Case Study: Blockchain Implementation in Enterprise Systems. (8)

Unit 4- Blockchain Security Challenges and Attacks (51% Attack, Double Spending). Privacy Mechanisms and Encryption Techniques. Regulatory and Compliance Issues. Smart Contract Vulnerabilities. Blockchain Governance Models. Ethical and Environmental Considerations (Energy Consumption Issues). (8+2)

Unit 5- Decentralized Applications (DApps). Central Bank Digital Currencies (CBDCs). Blockchain and FinTech Innovations. NFTs and Digital Ownership Concepts. Enterprise Blockchain Adoption Framework. Capstone Case Discussion: Designing a Blockchain Business Solution. (8+1)

Suggested Text Books:

1. Narayanan, Arvind, Joseph Bonneau, Edward Felten, Andrew Miller and Steven Goldfeder. Bitcoin and Cryptocurrency Technologies (Princeton University Press).
2. Drescher, Daniel. Blockchain Basics: A Non-Technical Introduction in 25 Steps (Apress).
3. Antonopoulos, Andreas M. Mastering Bitcoin (O'Reilly Media).

Suggested Reference Books:

1. Swan, Melanie. Blockchain: Blueprint for a New Economy (O'Reilly Media).
2. Tapscott, Don and Alex Tapscott. Blockchain Revolution (Penguin Random House).
3. Bashir, Imran. Mastering Blockchain (Packt Publishing).
4. Wattenhofer, Roger. The Science of the Blockchain (CreateSpace).
5. Daniel Drescher – Blockchain Basics
6. Narayanan et al. – Bitcoin and Cryptocurrency Technologies

Suggested E-Resources:

1. <https://nptel.ac.in/courses/106/105/106105184/> (Blockchain Architecture Design)
2. <https://www.ibm.com/blockchain/learn>
3. <https://www.coursera.org/learn/blockchain-basics>