

UNIVERSITY OF DELHI

CNC-II/093/1/Misc./2025/11

Dated: 31.07.2025

NOTIFICATION

Sub: Amendment to Ordinance V

Following addition be made to Appendix-II-A to the Ordinance V (2-A) of the Ordinances of the University;

Add the following:

The syllabus of the Discipline Specific Elective (DSE) papers to be offered by the College of Vocational Studies in BA (VS) for Semester-VII/VIII under Faculty of Social Science based on Undergraduate Curriculum Framework-2022, is notified herewith for the information of all concerned as per **Annexure-1**.


REGISTRAR

UNIVERSITY OF DELHI

UNDERGRADUATE CURRICULUM FRAMEWORK – 2022 BASED ON NEW EDUCATION POLICY-2020

**ADDITIONAL DSE PAPERS OF BA(VOCATIONAL) COURSES TO BE ADDED IN VII &
VIII SEMESTER**

BACHELOR OF ARTS (VS) **MATERIALS MANAGEMENT**

BACHELOR OF ARTS (VS) MATERIALS MANAGEMENT

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -7.1 (DSE-7.1)

SUPPLY CHAIN OPTIMIZATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Supply Chain Optimization (DSE- 7.1)	4	3	0	1	12 th Pass	-

SUPPLY CHAIN OPTIMIZATION

Learning Objective

- Understand the principles and techniques of supply chain optimization
- Learn to model and solve complex supply chain problems
- Analyze supply chain operations for efficiency and effectiveness

Learning Outcome:

After completion of the course, learners will be able to:

- Understand the importance of supply chain optimization in achieving business objectives.
- Learn to model and solve complex supply chain problems using optimization techniques.
- Analyze and optimize supply chain operations, including supply chain network design, inventory management, and transportation planning.
- Develop skills in using optimization software and tools to solve supply chain problems.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

8 Hours

Introduction to Supply Chain Optimization: Overview of supply chain management and optimization. Importance of supply chain optimization in business. Types of supply chain optimization problems.

Unit 2

15 Hours

Supply Chain Network Design: Modelling supply chain network design problems. Solving supply chain network design problems using optimization techniques. Case studies in supply chain network design.

Inventory Management: Inventory management models and techniques. Optimizing inventory levels using mathematical models. Case studies in inventory management.

Unit 3

12 Hours

Transportation Planning: Transportation planning models and techniques. Optimizing transportation routes and schedules using optimization software. Case studies in transportation planning.

Logistics and Distribution: Logistics and distribution models and techniques. Optimizing logistics and distribution operations using optimization software. Case studies in logistics and distribution.

Unit 4

10 Hours

Advanced Topics in Supply Chain Optimization: Stochastic programming and robust optimization in supply chain management. Metaheuristics and simulation-based optimization in supply chain management. Case studies in advanced supply chain optimization.

Practical:

- Map a Real-World Supply Chain: Choose a company (e.g., Big Bazaar, Amazon India, Marico, or Zomato). Map out its entire supply chain including suppliers, manufacturing, warehousing, distribution, and customers.
- Classify Supply Chain Optimization Problems: Classify the following scenarios as problems in network design, inventory optimization, transportation planning, or distribution management:
- EOQ and Reorder Point Calculation: Calculate EOQ, Safety Stock, and ROP for a local FMCG firm's SKUs.
- ABC Analysis and FSN Classification: Perform ABC and FSN analysis using product demand data of a local store.
- Select an Indian company and optimize one supply chain process (e.g., inventory, transportation, logistics) using either a mathematical model or simulation. Present data, analysis, optimization technique, and results.

Suggested Readings:

Chopra, S., & Meindl, P. (2019). Supply Chain Management: Strategy, Planning, and Operation (7th ed.). Pearson Education. Chapters 1–3: Overview of SCM and optimization needs.

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2008). Designing and Managing the Supply Chain (3rd ed.). McGraw-Hill. Chapter 1 & 2: Supply chain drivers and types of optimization problems.

Srivastava, S. K. (2007). Green supply-chain management: A state-of-the-art literature review. *International Journal of Management Reviews*, 9(1), 53-80. Highlights real-world importance of optimization.

MIT Center for Transportation & Logistics: <https://ctl.mit.edu/>

Shapiro, J. F. (2007). Modeling the Supply Chain (2nd ed.). Cengage Learning. Chapters 4–6: Network optimization, facility location problems.

Silver, E. A., Pyke, D. F., & Thomas, D. J. (2016). Inventory and Production Management in Supply Chains (4th ed.). CRC Press. Covers EOQ, safety stock, reorder point, and advanced inventory models.

Tersine, R. J. (1994). Principles of Inventory and Materials Management (4th ed.). Prentice Hall India. Case Studies & Industry Reports

CII-IL (Confederation of Indian Industry – Institute of Logistics):

Supply Chain Optimization in Indian FMCG Sector, Whitepaper, 2020. Available via CII membership or institutional access.

Case Study: Hindustan Unilever’s Demand Planning Transformation, Refer to: Harvard Business Review or Ivey Publishing case databases.

Agarwal, D. K., & Chaudhary, R. (2010). Logistics and Supply Chain Management. Macmillan India. Focus on Indian logistics networks.

Coyle, J. J., Langley, C. J., Novack, R. A., & Gibson, B. J. (2016). Supply Chain Management: A Logistics Perspective (10th ed.). Cengage., Chapters on transportation modeling and logistics execution.

Daskin, M. S. (2011). Network and Discrete Location: Models, Algorithms, and Applications (2nd ed.). Wiley. For route optimization and transportation problem formulation.

- **Software Tutorials**

- Google OR-Tools Documentation:
 - <https://developers.google.com/optimization>
- NITI Aayog Logistics Report 2021, 22, 24
- Discusses India's logistics costs and optimization strategies. <https://www.niti.gov.in>
- Kall, P., & Wallace, S. W. (1994). Stochastic Programming. Springer. Foundation of uncertainty-based SCM models.
- Talbi, E. G. (2009). Metaheuristics: From Design to Implementation. Wiley. Covers GA, PSO, SA and their use in SCM.
- Law, A. M. (2015). Simulation Modeling and Analysis (5th ed.). McGraw-Hill Education. Industry standard for simulation-based decision-making.
- Singh, A., & Jain, P. (2018). Application of Genetic Algorithms in Supply Chain Optimization – A Review. IJERA, 8(6), 51-58. Available on ResearchGate or Academia.edu
- Case Study: Flipkart’s Supply Chain Transformation Using Data Science, Available via McKinsey Insights or YourStory.in
- MITx MicroMasters in SCM, <https://micromasters.mit.edu/scm/SCM> Globe – Supply Chain Simulation Tool <https://www.scmglobe.com/>

Software and Tools: Use appropriate software and tools as required. Following are indicative only

- Optimization software such as CPLEX, Gurobi, or AMPL.
- Supply chain simulation software such as AnyLogic or Simio

BACHELOR OF ARTS (VS) MATERIALS MANAGEMENT

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -7.2 (DSE-7.2)

DIGITAL TRANSFORMATION IN LOGISTICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DIGITAL TRANSFORMATION IN LOGISTICS (DSE- 7.2)	4	3	0	1	12 th Pass	-

Learning Objective:

- Explore the latest digital trends and innovations shaping logistics and supply chain management, including blockchain, Internet of Things (IoT), artificial intelligence (AI), and robotics
- Analyze the use of robotics and automation, including autonomous vehicles, drones, and warehouse robots, to increase productivity and reduce errors
- Develop skills and competencies necessary to manage and leverage emerging digital logistics technologies effectively in a rapidly evolving field
- Understand the strategic importance of integrating digital tools to streamline workflows, reduce costs, and enhance supply chain collaboration and decision-making

Learning Outcome: Students will be able to:-

- Understand the concept of digital transformation in logistics and its impact on supply chain management.
- Learn about the latest digital technologies and innovations in logistics, including blockchain, IoT, AI, and robotics.
- Analyze the opportunities and challenges of digital transformation in logistics.
- Develop skills in designing and implementing digital solutions for logistics and supply chain management.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

10 hours

Introduction to Digital Transformation in Logistics: Overview of digital transformation in logistics and supply chain management, Importance of digital transformation in logistics. Key drivers of digital transformation in logistics.

Unit 2:

15 hours

Digital Technologies in Logistics: Blockchain technology and its applications in logistics. Internet of Things (IoT) and its applications in logistics. Artificial intelligence (AI) and machine learning in logistics. Robotics and automation in logistics.

Digital Solutions for Logistics: Digital solutions for supply chain visibility and transparency. Digital solutions for inventory management and tracking. Digital solutions for transportation management and optimization. Digital solutions for warehouse management and automation.

Unit 3

10 hours

Implementation and Challenges: Implementing digital solutions in logistics and supply chain management. Challenges and obstacles in digital transformation in logistics. Change management and organizational transformation.

Unit 4

10 hours

Future of Digital Logistics: Future trends and innovations in digital logistics. Impact of emerging technologies on logistics and supply chain management. Opportunities and challenges in the future of digital logistics.

Practical:

- **Case Study Analysis:** Analyse a real-world company (e.g., Amazon, DHL, Maersk) that has undergone digital transformation in logistics.
- **SWOT Analysis:** Prepare a SWOT analysis for a logistics firm considering digital transformation.
- **Case-based Analysis:** Flipkart/Amazon uses AI in forecasting demand. Analyze how it helps inventory and transportation.
- **Challenges Brainstorm:** Brainstorm top 10 challenges in digital transformation in logistics.
- **Technology Forecast Report:** Research and prepare a short report on future technologies (e.g., drones, digital twins, autonomous trucks) and their potential in logistics.

Suggested Readings:

Christopher, M. (2016). Logistics & Supply Chain Management (5th ed.). Pearson Education. Chapter on the digital impact on logistics and evolving global supply chains.

Deloitte. (2020). Digital Supply Networks: Reinventing supply chains for the digital age. <https://www2.deloitte.com/us/en/pages/manufacturing/articles/digital-supply-networks.html>

Klaus Schwab (2017). The Fourth Industrial Revolution. World Economic Forum. Relevant for understanding the macro-drivers of digital transformation.

Chopra, S., & Meindl, P. (2019). Supply Chain Management: Strategy, Planning, and Operation (7th ed.). Pearson. Introduction to supply chains and digital adaptation drivers.

Manners-Bell, J. (2021). The Logistics and Supply Chain Innovation Handbook: Disruptive Technologies and New Business Models. Kogan Page. Focus on Blockchain, IoT, AI, and automation in logistics.

Baryannis, G., Dani, S., & Antoniou, G. (2019). "Predictive analytics and artificial intelligence in supply chain management: Review and implications for the future." Computers & Industrial Engineering, 137, 106024. <https://doi.org/10.1016/j.cie.2019.106024>

McKinsey & Company (2022). Automation and AI in Supply Chains. <https://www.mckinsey.com/business-functions/operations/our-insights/automation-in-logistics>

IBM Blockchain Whitepaper (2020): How Blockchain Can Transform the Supply Chain. <https://www.ibm.com/blockchain/supply-chain>

GS1 India Reports (2023). IoT and Traceability Standards in Indian Logistics, <https://www.gs1india.org/>

Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press. Discusses implementation strategies and managing change.

Accenture. (2021). Digital Transformation in Supply Chain: Realizing the Digital Promise. <https://www.accenture.com/in-en/insights/consulting/digital-supply-chain-transformation>

PwC (2020). The Digital Supply Chain: Next Generation Supply Chain Management. <https://www.pwc.com/gx/en/industries/industries-4.0/digital-supply-chain.html>

Kotter, J.P. (2012). Leading Change. Harvard Business Review Press. Essential reading on change management in digital transformation projects.

World Economic Forum (2022). Digital Transformation of Industries: Logistics. <https://www.weforum.org/reports/digital-transformation-of-industries-logistics>

Capgemini Research Institute (2021). Smart Logistics: How AI and IoT are Reshaping Logistics. <https://www.capgemini.com/research/smart-logistics/>

EY India (2023). Future of Logistics in India: Technology-Driven Growth and Resilience. https://www.ey.com/en_in/logistics/future-of-logistics.

MHI/Deloitte (2023). Annual Industry Report: Innovation Driven Resilience. <https://www.mhi.org/publications/report>

UNCTAD (2021). Review of Maritime Transport: Digitalization and Sustainability. <https://unctad.org/topic/transport-and-trade-logistics/review-of-maritime-transport>

SCM World (Gartner): Supply Chain Trends Reports – www.gartner.com MIT Center for Transportation & Logistics – <https://ctl.mit.edu>

NASSCOM Logistics & SCM Reports – www.nasscom.in

Software and Tools: Use appropriate software and tools as required. Following are indicative only

- Digital logistics platforms and software, such as transportation management systems (TMS) and warehouse management systems (WMS).
- Data analytics and visualization tools, such as Tableau or Power BI.

BACHELOR OF ARTS (VS) MATERIALS MANAGEMENT

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -7.3 (DSE-7.3)

Inventory Management Under Industry 4.0

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Inventory Management Under Industry 4.0 (DSE- 7.3)	4	3	0	1	12 th Pass	-

Learning Objective:

- Explore the latest trends and innovations in inventory management, emphasizing big data analytics, machine learning (ML), and generative AI
- Understand how AI-powered systems enable accurate demand forecasting and dynamic inventory optimization to reduce overstock and stockouts
- Analyze the role of real-time data collection using IoT devices, sensors, and RFID for enhanced inventory visibility and tracking
- Understand the impact of AI and analytics on improving customer satisfaction through better product availability and faster order fulfilment.

Learning Outcome: Students will be able to:

- Understand the concept of Inventory Management 4.0 and its impact on supply chain management.
- Learn about the latest technologies and innovations in inventory management, including big data analytics, machine learning, and generative AI.
- Analyze the opportunities and challenges of implementing Inventory Management 4.0.
- Develop skills in designing and implementing technology-driven inventory solutions.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

10 hours

Introduction to Inventory Management 4.0: Overview of inventory management and its importance in supply chain management. Evolution of inventory management and the role of technology. Key drivers of Inventory Management 4.0.

Unit 2

15 hours

Big Data Analytics in Inventory Management: Introduction to big data analytics and its applications in inventory management. Data visualization and reporting tools for inventory management. Predictive analytics for inventory forecasting and optimization.

Machine Learning in Inventory Management: Introduction to machine learning and its applications in inventory management. Demand forecasting using machine learning algorithms. Inventory optimization using machine learning models.

Unit 3

15 hours

Generative AI in Inventory Management: Introduction to generative AI and its applications in inventory management. Generating inventory optimization strategies using generative AI. Case studies in generative AI for inventory management.

Implementation and Challenges: Implementing Inventory Management 4.0 solutions. Challenges and obstacles in implementing Inventory Management 4.0. Change management and organizational transformation.

Unit 4

5 hours

Case Studies and Best Practices: Real-world case studies of Inventory Management 4.0 implementation. Best practices for designing and implementing Inventory Management 4.0 solutions.

Practical:

- **Evolution Timeline Creation:** Create a visual timeline (digital/poster) showing the evolution of inventory management from manual processes to Inventory Management 4.0.
- **Industry Analysis Report:** Interview a local logistics manager or warehouse operator (or research online) and prepare a short report (800–1000 words) covering:
- **Inventory Dashboard Design:** Using tools like Excel, Tableau, or Google Data Studio, design a basic inventory dashboard.
- **Predictive Analytics Simulation:** Use a sample dataset (provided or online retail inventory data) and perform demand forecasting using Excel/Google Sheets.
- **Case Study Presentation:** Select any successful Inventory 4.0 implementation case (e.g., Amazon, H&M, Flipkart).

Suggested Readings:

Inventory Management Explained by David J. Piasecki – Chapters 1–3, (Covers fundamentals and systems evolution)

Supply Chain Management: Strategy, Planning, and Operation by Sunil Chopra – Chapter on Inventory Management (Explains strategic relevance and changing role of technology)

Singh, A., & Verma, A. (2020). "Inventory 4.0: The Next Generation of Inventory Management." International Journal of Supply Chain Management, Vol. 9(5) [Available on IJSCM or ResearchGate]

Deloitte (2020). "The Rise of Industry 4.0: Intelligent Inventory." <https://www2.deloitte.com/>

Big Data and Analytics for Intelligent Supply Chain Management” by Bikramjit Pal – Chapters 2, 4, 6 (Practical examples of big data in inventory contexts)

Machine Learning for Supply Chain Planning by Gerard Blokdyk (Applied ML techniques in forecasting and optimization)

Choi, T. M., & Lambert, J. H. (2021). "Big data analytics in operations management. "Production and Operations Management, 30(3), 622–636. [Wiley Online Library]

IBM Analytics. “Predictive Analytics in Inventory and Demand Planning.” <https://www.ibm.com/analytics>

Tool Tutorials: Tableau or Power BI for inventory dashboards: <https://www.tableau.com/learn>

Google Data Studio tutorials: <https://datastudio.google.com/>

McKinsey & Company (2023). “The State of AI in Supply Chains and Operations.” <https://www.mckinsey.com/>

Artificial Intelligence for Business by Doug Rose – Chapter on AI-driven decision making (Intro to AI/GenAI for non-technical students)

Wang, G., Gunasekaran, A., Ngai, E. W. T., & Papadopoulos, T. (2022). “Big data analytics and AI in supply chain management: A review and future directions.” International Journal of Production Economics

Case Harvard Business Review (2023). “How Generative AI Can Transform Supply Chain Planning.” <https://hbr.org/>

“Leading Change” by John P. Kotter – Focus on organizational transformation for tech adoption

“Supply Chain Management Casebook” by Chuck Munson – Look for inventory management case studies from Amazon, Zara, Dell

Report: Capgemini (2021). “Digital Supply Chain Transformation: Inventory Use Cases.” <https://www.capgemini.com/>

- Industry Case Study Reports:
 - Amazon Inventory Strategy: MIT Sloan Case Studies
 - Flipkart/BigBasket Inventory Digitization: NASSCOM reports
 - Walmart Supply Chain Automation: Gartner
- Best Practices Blog:
 - Cognizant or SAP Insights Blog, <https://www.cognizant.com/>
 - <https://www.sap.com/insights.html>
- MIT OpenCourseWare – Supply Chain Analytics, <https://ocw.mit.edu/>
- Inventory Management Specialization – Rutgers University
- AI in Supply Chains – Stanford or Google AI Courses

BACHELOR OF ARTS (VS) MATERIALS MANAGEMENT

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -7.4 (DSE-7.4)

Fintech and Industry 4.0

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Fintech and Industry 4.0 (DSE- 7.4)	4	3	0	1	12 th Pass	-

Learning Objective:

- Understand the integration of Fintech innovations with Industry 4.0 technologies in financial services and industrial operations
- Explore the latest trends in Fintech, including AI-powered financial services, embedded finance, blockchain, and real-time payment systems
- Analyze how digital technologies drive automation, decentralization, and data-driven decision making in finance and industry
- Evaluate challenges and opportunities related to cybersecurity, regulatory compliance, and ethical considerations in Fintech and Industry 4.0

Learning Outcome: Students will able to:

- Understand the concept of Fintech and Industry 4.0 and their impact on financial services and industrial operations.
- Learn about the latest technologies and innovations in Fintech and Industry 4.0, including digital payments, blockchain, and artificial intelligence.
- Analyze the opportunities and challenges of implementing Fintech and Industry 4.0 solutions.
- Develop skills in designing and implementing Fintech and Industry 4.0 solutions.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

10 hours

Introduction to Fintech and Industry 4.0: - Overview of Fintech and Industry 4.0 and their importance. Evolution of Fintech and Industry 4.0. Key drivers of Fintech and Industry 4.0. Role of Fintech in finance sector.

Unit 2

11 hours

Digital Payments and Fintech: Introduction to digital payments and Fintech., Types of digital payments and Fintech solutions. Benefits and challenges of digital payments and Fintech.

Blockchain and Distributed Ledger Technology: Introduction to blockchain and distributed ledger technology. Applications of blockchain in Fintech and Industry 4.0. Benefits and challenges of blockchain technology.

Unit 3

12 hours

Artificial Intelligence and Machine Learning in Fintech and Industry 4.0: Introduction to artificial intelligence and machine learning. Applications of AI and ML in Fintech and Industry 4.0. Benefits and challenges of AI and ML in Fintech and Industry 4.0.

Fintech and Industry 4.0 Applications: Fintech applications in financial services. Industry 4.0 applications in industrial operations. Case studies in Fintech and Industry 4.0. increasing the access of financial services to masses, financial inclusion and Fintech.

Unit 4

12 hours

Implementation and Challenges: Implementing Fintech and Industry 4.0 solutions. Challenges and obstacles in implementing Fintech and Industry 4.0 solutions. Change management and organizational transformation.

Practical:

- **Evolution Mapping:** Create a visual timeline showing the evolution of Fintech and Industry 4.0 from 2000 to the present. Highlight at least five major milestones in each.
- **Comparative Analysis:** Compare traditional financial services (pre-Fintech) with modern Fintech-enabled services. Use parameters like speed, accessibility, cost, and security.
- **Industry Driver Deep Dive:** Select any two key drivers of Fintech or Industry 4.0 (e.g., IoT, APIs, cloud computing, mobile penetration). Analyze their impact on a financial service like lending, payments, or wealth management.
- **Fintech Product Design:** Design a basic wireframe (or flowchart) of a digital payment app targeted at rural users with low digital literacy.
- **Use Case Identification:** Identify and briefly describe five digital payment modes (e.g., UPI, wallets, NEFT). For each, suggest one specific user group or scenario where it is most beneficial.
- **Impact Analysis:** Evaluate how the use of AI or blockchain has improved efficiency, security, or cost in any one Fintech product you use (e.g., Paytm, PhonePe, Razorpay, Cred).
- **Implementation Planning:** Choose one Fintech or Industry 4.0 tool (like AI chatbot, blockchain ledger, robotic process automation). Deliverable: A Gantt chart or project plan outline.
- **Case Study Analysis – Financial Inclusion:** Analyze how a specific Fintech initiative (like Jan Dhan Yojana + UPI + Aadhaar) has helped in financial inclusion in India.

Suggested Readings:

Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The Evolution of Fintech: A New Post-Crisis Paradigm?

Klaus Schwab. (2016). The Fourth Industrial Revolution.

World Economic Forum – Introduction to Industry 4.0 and its components.

Prasad, A. (2020). Fintech: The Technology Driving Disruption in the Financial Services Industry.

World Economic Forum Report (2020): Shaping the Future of Financial and Monetary Systems

Raghavan, S. (2020). Digital Payment Systems: Evolution and Emerging Trends in India.

RBI Reports: Vision Documents for Payment Systems in India (2019–2025)

KPMG Report (2021): Fintech in India – Powering Mobile Payments

Accenture Report: Driving the Future of Payments

Saeed, A., & Saleh, A. (2021). Artificial Intelligence in Financial Services: Use Cases and Implementation Challenges.

Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction. Princeton University Press.

World Bank (2022): Blockchain and DLT for Financial Inclusion

IBM Whitepaper (2021): AI in Financial Services: Real Applications of Machine Learning

EY Report (2022): Global FinTech Adoption Index

BCG Report (2023): Winning in Digital Banking – Strategy & Execution

McKinsey & Company (2021): Digital Transformation in Financial Services: Success Factors

Klaus Schwab & Nicholas Davis (2018): Shaping the Future of the Fourth Industrial Revolution.

World Economic Forum – Focus on organizational transformation.

OECD Report (2020): The Impact of Digital Financial Services on Financial Inclusion

“Fintech: Foundations & Applications” – University of Michigan

“AI for Everyone” – Andrew Ng

“Blockchain Basics” – University at Buffalo

www.finextra.com – Daily fintech news

www.indiastack.org – Indian digital infrastructure stack

www.rbi.org.in – Digital payment policy updates

Software and Tools: Use appropriate software and tools as required.

- Fintech software and platforms, such as digital payment systems and blockchain platforms.
- Data analytics and visualization tools, such as Tableau or Power BI.

BACHELOR OF ARTS (VS) MATERIALS MANAGEMENT**Semester VIII****DISCIPLINE SPECIFIC ELECTIVE COURSE -8.1 (DSE-8.1)****Logistics and Warehouse Management 4.0****CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Logistics and Warehouse Management in Industry 4.0 (DSE- 8.1)	4	3	0	1	12 th Pass	-

Course Content:**(Theory 45 hrs + Practical 30 hrs)****Learning Objective:**

- Explore the latest trends and innovations in logistics and warehouse management, including smart warehousing and automation
- Analyze the integration of advanced Warehouse Management Systems (WMS) with robotics and automation for optimized operations
- Develop skills to leverage technologies such as automated storage and retrieval systems (ASRS), wearable tech, and augmented reality (AR) for enhanced operational efficiency
- Prepare to implement data-driven decision-making using IoT, predictive maintenance, and digital integration within logistics and warehouse environments.

Learning Outcome: After this course students will be able to:

- Understand the concept of Logistics and Warehouse Management 4.0 and its impact on supply chain management.
- Learn about the latest technologies and innovations in logistics and warehouse management, including smart warehousing, automation, and digital technologies.
- Analyze the opportunities and challenges of implementing Logistics and Warehouse Management in Industry 4.0.
- Develop skills in designing and implementing efficient and effective logistics and warehouse management systems.

Course Content**Unit 1****10 Hours**

Introduction to Logistics and Warehouse Management 4.0: Overview of logistics and warehouse management and its importance in supply chain management. Evolution of logistics and warehouse management and the role of technology. Key drivers of Logistics and Warehouse Management 4.0.

Unit 2

11 Hours

Smart Warehousing: Introduction to smart warehousing and its applications. Warehouse automation and robotics. Warehouse management systems (WMS) and warehouse execution systems (WES).

Logistics and Transportation Management: Introduction to logistics and transportation management. Transportation management systems (TMS) and route optimization. Logistics and transportation management using digital technologies.

Unit 3

11 Hours

Automation and Robotics in Logistics and Warehouse Management: Introduction to automation and robotics in logistics and warehouse management. Automated storage and retrieval systems (AS/RS). Robotic picking and packing systems.

Digital Technologies in Logistics and Warehouse Management: Introduction to digital technologies in logistics and warehouse management. Blockchain technology and its applications in logistics. Internet of Things (IoT) and its applications in logistics and warehouse management.

Unit 4

13 Hours

Implementation and Challenges: Implementing Logistics and Warehouse Management 4.0 solutions. Challenges and obstacles in implementing Logistics and Warehouse Management 4.0. Change management and organizational transformation.

Practical:

- Use Google Maps or a free TMS demo to create an optimal delivery route for 5 cities starting from your warehouse. Compare time, distance, and fuel cost.
- Given a company with 3 regional warehouses and growing demand, recommend a WMS solution. Prepare a comparison matrix of at least 3 vendors (e.g., Oracle WMS, Infor WMS, Zoho Inventory).
- Design a basic layout for a 5,000 sq ft smart warehouse that includes Receiving area, picking zone, AS/RS area, Packing and dispatch area, Charging station for AGVs
- A startup is struggling with order delays and customer complaints. They have no digital systems. Suggest 3 smart warehousing technologies they should adopt first, and why.
- Imagine you are setting up a new cold chain logistics network. Identify 3 ways IoT sensors can be used to improve safety and quality of goods.
- Create a flowchart showing how blockchain can be used to track a shipment from manufacturer to end-customer, ensuring data is immutable and visible.
- Write a simple process flow of how a robotic picking system works—from scanning an order to delivery at the packing station. Identify benefits and challenges.

- A warehouse installs an AS/RS system costing ₹20 lakhs. It reduces labor cost by ₹5 lakhs per year. Calculate payback period and discuss indirect benefits.
- Create a risk matrix for implementing WMS in a multi-location logistics company. Include risks such as system failure, staff resistance, cybersecurity, and integration.
- Prepare a 6-step implementation plan to roll out a Logistics 4.0 solution (e.g., IoT and WMS) in a 100-person warehouse. Include pilot testing, training, and feedback loops.
- Assume your warehouse staff is resisting robotics due to fear of job loss. Draft a short internal memo addressing their concerns and explaining how the company will upskill them.

Suggested Readings:

- Rushton, A., Croucher, P., & Baker, P. (2017). The Handbook of Logistics and Distribution Management (5th ed.). Kogan Page.
- Christopher, M. (2016). Logistics & Supply Chain Management (5th ed.). Pearson Education.
- Schwab, K. (2017). The Fourth Industrial Revolution. Crown Publishing. (Understanding Industry 4.0 and its impact on logistics.)
- KPMG Report (2020). India's Supply Chain Evolution – Driving the Next Wave of Growth. URL: <https://home.kpmg/in/en/home/insights/2020/11/supply-chain-transformation.html>
- Frazelle, E. (2015). World-Class Warehousing and Material Handling. McGraw-Hill. (Automation, WMS, warehouse best practices.)
- Tompkins, J. A., & Smith, J. D. (2010). Warehouse Management Handbook. Tompkins Press. (WMS/WES systems and smart warehousing architecture.)
- Singh, S. P., & Gunasekaran, A. (2021). Smart Warehousing: Concepts, Systems, and Applications. IGI Global. (Real-time warehouse automation, IoT applications.)
- IBM White Paper (2022). Transforming Transportation and Logistics with AI and IoT. URL: <https://www.ibm.com/thought-leadership/internet-of-things/logistics>
- Chopra, S., & Meindl, P. (2021). Supply Chain Management: Strategy, Planning, and Operation (7th ed.). Pearson. (Transportation optimization and technology integration.)
- Bogue, R. (2016). Robots in logistics: a review of current technology and applications. Industrial Robot: An International Journal, 43(6), 583-588.
- Ganguly, A., & Sharma, P. (2021). Emerging Technologies in Logistics and Supply Chain Management. McGraw-Hill India. (AS/RS, robotic automation, AI in logistics.)
- Maersk & IBM Blockchain Case Study (2019). TradeLens: Applying Blockchain to Global Trade. URL: <https://www.tradelens.com>
- Statista Report (2023). IoT in Warehouse Management – Global Trends. URL: <https://www.statista.com/topics/4209/internet-of-things/>
- Accenture (2021). Digital Supply Chain Transformation Using IoT and Blockchain. <https://www.accenture.com/us-en/insights/industry-x/digital-supply-chain>
- Kotter, J. P. (2012). Leading Change. Harvard Business Review Press. (Change management strategies relevant to digital transitions.)

- Waller, M. A., & Fawcett, S. E. (2013). Data Science, Predictive Analytics, and Big Data: A Revolution That Will Transform Supply Chain Design and Management. *Journal of Business Logistics*, 34(2), 77–84. DOI: 10.1111/jbl.12010
- Capgemini (2020). Unlocking the Value of Industry 4.0 in Warehousing. URL: <https://www.capgemini.com/research/industry-4-0-in-warehousing/>
- PwC Report (2022). Digital Transformation in Logistics: Implementation Challenges and Solutions. URL: <https://www.pwc.com/gx/en/industries/transportation-logistics/publications.html>
- McKinsey & Co. (2021). Overcoming Digital Transformation Barriers in Supply Chain. URL: <https://www.mckinsey.com/business-functions/operations/our-insights>

BACHELOR OF ARTS (VS) MATERIALS MANAGEMENT

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -8.2 (DSE-8.2)

PROCUREMENT MANAGEMENT AND INDUSTRY 4.0

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Procurement Management and Industry 4.0 (DSE- 8.2)	4	3	0	1	12 th Pass	-

Learning Objective:

- Explore the latest trends and innovations in procurement management, including digital technologies, data analytics, and artificial intelligence (AI)
- Understand how AI and automation tools are transforming procurement processes to enhance efficiency and decision-making
- Develop skills to build resilient and agile procurement processes adaptable to changing market and geopolitical conditions

Learning Outcome: After this student will be able to:

- Understand the concept of Procurement Management 4.0 and its impact on supply chain management.
- Learn and apply the latest technologies and innovations in procurement management, including digital procurement platforms, data analytics, and artificial intelligence.
- Analyze the opportunities and challenges of implementing Procurement Management 4.0.
- Develop skills in designing and implementing procurement strategies that leverage the latest technologies and innovations.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

5 Hours

Introduction to Procurement Management 4.0: Overview of procurement management and its importance in supply chain management. Evolution of procurement management and the role of technology. Key drivers of Procurement Management 4.0.

Unit 2

15 Hours

Digital Procurement Platforms: Introduction to digital procurement platforms and their applications. E-procurement systems and digital marketplaces. Benefits and challenges of digital procurement platforms.

Data Analytics in Procurement: Introduction to data analytics and its applications in procurement. Spend analysis and supplier performance management. Predictive analytics for procurement forecasting and optimization.

Unit 3

15 Hours

Artificial Intelligence in Procurement: Introduction to artificial intelligence and its applications in procurement. AI-powered procurement platforms and tools. Benefits and challenges of AI in procurement.

Procurement Strategy and Innovation: Developing procurement strategies that leverage digital technologies and innovations. Innovation in procurement and supply chain management. Case studies in procurement innovation.

Unit 4

10 Hours

Implementation and Challenges: Implementing Procurement Management 4.0 solutions. Challenges and obstacles in implementing Procurement Management 4.0. Change management and organizational transformation.

Practical:

- Choose an Indian or global company and trace its procurement evolution from traditional to Procurement 4.0. Create a timeline and highlight key milestones (e.g., introduction of e-procurement, AI tools, etc.).
- Explore the role of emerging technologies in procurement: Identify 3 current technologies transforming procurement (e.g., blockchain, AI, IoT) and explain how each one changes supplier selection, purchasing, and contract management.
- Drivers of Procurement 4.0 – Real-World Identification: Conduct interviews (real or simulated) with procurement managers in any sector (e.g., retail, pharma, or manufacturing). Identify and list key drivers influencing digital procurement adoption.
- Explore e-procurement tools: Choose any two digital procurement platforms (e.g., SAP Ariba, Coupa, Jaggaer) and compare their key features, integrations, and user experience.
- Predictive Procurement Case Study: Analyze a case where predictive analytics was used to forecast demand and optimize procurement (e.g., Amazon, Flipkart). Identify the model used and benefits achieved.
- Case Analysis on Innovation: Study one real-life case of procurement innovation from companies like IBM, Tata Steel, or Unilever. Analyze how digital transformation improved outcomes (cost, agility, compliance).
- Change Management Role-Play: Role-play a scenario where a procurement manager presents Procurement 4.0 implementation to a resistant team. Handle objections, explain benefits, and propose a phased plan.

Suggested Readings:

- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2020). Purchasing and Supply Chain Management (7th Ed.). Cengage Learning. (Chapters: 1–3) <https://www.cengage.com>
- KPMG (2020). Procurement 4.0: Are you ready for the digital revolution? <https://home.kpmg/xx/en/home/insights/2020/03/procurement-4-0.html> Explains key drivers of Procurement 4.0 and technology impact.
- World Economic Forum (2017). Shaping the Future of Production: Four Ways Procurement is Evolving <https://www.weforum.org/agenda/2017/03/procurement-future-manufacturing-industry-4-0/> (Discusses evolution of procurement and digital transformation.)
- Harvard Business Review (2020). How Digital Procurement Platforms Are Transforming Supply Chains <https://hbr.org> (Insightful article on real-world adoption of platforms like SAP Ariba and Coupa.)
- Accenture (2021). The Digital Procurement Future <https://www.accenture.com/us-en/insights/consulting/digital-procurement> (Details benefits, use cases, and challenges of e-procurement.)
- APICS/ASCM (2022). Supply Chain Analytics <https://www.ascm.org> (Includes practical modules on spend analysis and supplier performance using data.)
- Gartner Reports (2021). Market Guide for Procurement Analytics Applications <https://www.gartner.com> (Focuses on procurement-specific analytics and spend dashboards.)
- Mena, C., & Schoenherr, T. (2020). Analytics in Procurement: Challenges and Opportunities. Journal of Purchasing and Supply Management, 26(3), 100628. <https://doi.org/10.1016/j.pursup.2020.100628>
- McKinsey & Company (2019). The Next-Generation Operating Model for the Digital Procurement Organization <https://www.mckinsey.com/business-functions/operations/our-insights> (Covers AI use cases and strategy alignment.)
- World Economic Forum & Bain & Company (2020). Winning the Race for AI-Powered Procurement <https://www.weforum.org/reports/winning-the-race-for-ai-powered-procurement> (Comprehensive overview of AI tools and innovation.)
- Deloitte (2021). AI in Procurement: From Automation to Intelligence <https://www2.deloitte.com> (Real-world applications, tools, and AI-led procurement processes.)
- Bals, L., Hartmann, E., & Ritter, T. (2019). Digital Transformation of Strategic Procurement: The Impact of Artificial Intelligence. Journal of Purchasing and Supply Management, 25(4), 100614. <https://doi.org/10.1016/j.pursup.2019.100614>
- PwC (2021). Digital Procurement: Accelerating Transformation <https://www.pwc.com/gx/en/operations/digital-procurement.html> (Describes roadmap, barriers, and implementation strategies.)
- Change Management Institute (2019). Managing Change in Digital Transformation Projects <https://www.change-management-institute.com> Practical guide to handle resistance and align stakeholders.
- Capgemini Research Institute (2020). Procurement 4.0: The Future Procurement Operating Model <https://www.capgemini.com/research> (Discusses governance, digital capability building, and transformation challenges.)

- Van Weele, A. J. (2018). Purchasing and Supply Chain Management: Analysis, Strategy, Planning and Practice (7th Ed.). Cengage Learning. (Especially Chapters on Implementation, Risk, and Strategy.)

BACHELOR OF ARTS (VS) MATERIALS MANAGEMENT

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -8.3 (DSE-8.3)

LEGAL ASPECTS OF SUPPLY CHAIN MANAGEMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Legal Aspects of Supply Chain Management (DSE- 8.3)	4	3	0	1	12 th Pass	-

Learning Objective:

- Understand the key legal principles governing supply chain management, including contract law, intellectual property rights, product liability, and dispute resolution.
- Analyze the legal framework applicable to supply chain agreements and transactions in different jurisdictions.
- Comprehend the formation, interpretation, and enforcement of contracts within supply chains.

Learning Outcome: Students will be able to:

- Understand the legal framework governing supply chain management.
- Learn about the key legal issues in supply chain management, including contracts, intellectual property, and product liability.
- Analyze the legal risks and opportunities in supply chain management.
- Develop skills in navigating complex legal issues in global supply chains.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1: Introduction to Legal Aspects of Supply Chain Management: Overview of supply chain management and the role of law. Sources of law governing supply chain management. Importance of understanding legal aspects of supply chain management. **5 Hours**

Unit 2: Contracts in Supply Chain Management: Contract law and supply chain management. Types of contracts in supply chain management. Contract negotiation and drafting. Intellectual Property in Supply Chain Management: Intellectual property law and supply chain management. Types of intellectual property in supply chain management. Protecting intellectual property in supply chain management. **13 Hours**

Unit 3: Product Liability and Supply Chain Management: Product liability law and supply chain management. Types of product liability claims. Managing product liability risks in supply chain management.

Dispute Resolution in Supply Chain Management: Dispute resolution mechanisms in supply chain management. Arbitration and mediation in supply chain disputes. Litigation and supply chain disputes. **12 Hours**

Unit 4: Global Supply Chain Management and International Law: International law and supply chain management. Trade agreements and supply chain management. Managing legal risks in global supply chains. **15 Hours**

Practical:

- **Case of Regulatory Non-Compliance in Sourcing:** A leading garment company sourced cotton from a region recently banned under an international regulation due to unethical labor practices. The company claimed it was unaware. Identify the legal source (national/international) relevant to the issue. Assess the company's legal and reputational exposure. Draft a brief compliance checklist that could help the procurement team avoid such pitfalls.
- **Breach of Contract Case in Logistics:** A logistics provider failed to deliver pharmaceutical goods within the stipulated timeframe, breaching a temperature-sensitive shipment clause. Identify the type of contract and breach involved. Suggest remedies available to the buyer. Draft a model clause for temperature-sensitive goods that mitigates such risks.
- **Intellectual Property Theft in a Supplier Relationship:** A component supplier replicates and sells a patented design of a multinational manufacturer to third parties. Identify the type of intellectual property involved. Evaluate the legal remedies available to the manufacturer. Draft a sample IP protection clause in a supply contract.
- **Arbitration in a Cross-Border Dispute:** An Indian exporter and a German buyer are in dispute over delivery terms, but the contract includes an ICC arbitration clause. Describe the steps in the arbitration process applicable in this case. Evaluate pros and cons of arbitration vs. litigation in SCM. Suggest ways to draft clear dispute resolution clauses for global contracts.
- **Compliance with Export Control Laws:** A company is penalized for exporting dual-use goods without the required license. Define dual-use goods under international export control laws. Discuss the company's legal breach and compliance gaps. Recommend a compliance framework for managing export controls.

Suggested Readings:

Agnihotri Anurag, Dagar Inderjeet, (2022) Business Law , Sage Text Delhi

Agnihotri Anurag, Dagar Inderjeet, (2023) Company law S.Chand Delhi

Monczka, R.M., Handfield, R.B., Giunipero, L.C., & Patterson, J.L. (2020). Purchasing and Supply Chain Management (7th ed.). Cengage Learning. (Chapter: "Legal and Ethical Issues in Supply Management")

International Chamber of Commerce (ICC). (2020). Incoterms® 2020: ICC Rules for the Use of Domestic and International Trade Terms. (Essential for understanding international legal terminology. <https://iccwbo.org>)

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2021). Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies. McGraw-Hill Education. (Section on supply chain risk and compliance.)

Beatty, J.F., Samuelson, S.S., & Abril, P.S. (2021). Business Law and the Regulation of Business (13th ed.). Cengage Learning. (Chapters on contracts and intellectual property law.)

World Intellectual Property Organization (WIPO) – IP and Business Series
https://www.wipo.int/sme/en/ip_business/

Miller, R.L., & Cross, F.B. (2022). The Legal Environment of Business: Text and Cases (11th ed.). Cengage Learning. (Chapters on tort law, product liability, and dispute resolution.)

UNCITRAL (United Nations Commission on International Trade Law)

Model Law on International Commercial Arbitration (2006 revision)
https://uncitral.un.org/en/texts/arbitration/modellaw/commercial_arbitration

Guidance on arbitration and mediation under ICC rules. <https://iccwbo.org/dispute-resolution-services/>

Hoekman, B., & Kostecki, M.M. (2021). The Political Economy of the World Trading System (4th ed.). Oxford University Press. (Covers WTO agreements, trade barriers, and global supply rules.)

Van Hoek, R.I. (2020). Research Handbook on Supply Chain Management. Edward Elgar Publishing. (Includes global legal frameworks and case studies.)

World Trade Organization (WTO) – Trade and Supply Chain reports

Reports on trade policy, tariff risks, and global legal impacts on SCM. <https://www.wto.org/>

Indian Directorate General of Foreign Trade (DGFT) – Foreign Trade Policy
<https://dgft.gov.in>

Harvard Business Review Case Studies: <https://hbr.org/store/case-studies>

MIT Center for Transportation and Logistics: <https://ctl.mit.edu>

Journal of Supply Chain Management: <https://onlinelibrary.wiley.com/journal/1745493x>

BACHELOR OF ARTS (VS) HUMAN RESOURCE MANAGEMENT

Bachelor of Arts (VS)- Human Resource Management

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -7.1 (DSE-7.1)

HUMAN RESOURCE AUDITING

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
HUMAN RESOURCE AUDITING (DSE- 7.1)	4	3	0	1	12th Pass	-

Learning Objective:

- Learn the importance of ensuring legal compliance through HR auditing
- Explore different types of HR audits and their specific purposes
- Develop skills in audit reporting, identifying risks, and creating action plans for HR improvements
- Emphasize adherence to ethical standards and data privacy during HR audits

Learning Outcomes:

After studying the course, the students will be able:

- To understand the concept, scope, and significance of Human Resource Audit.
- To assess, Design and conduct HR audits for various HR functions and use the audit findings for strategic HR planning and compliance.
- To use Human Resource Accounting as a strategic HR tool for talent valuation, workforce planning, and evidence-based decision-making.
- To apply Audit Tools and Techniques and Learn methodologies including interviews, questionnaires, document analysis, and benchmarking.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

11 hours

Foundations of Human Resource Auditing: Meaning and Importance for HR professionals and organizations, The evolution of human resource auditing and relevance in the knowledge economy, Role of HR in human capital management and accounting, Types of audits: Compliance, Strategic, Functional, Diagnostic, Differences between HR Audit and HR Evaluation

Unit 2

11 hours

HR Audit Process and Methodology: Phases of HR Audit: Pre-audit planning, Audit process, Data collection and analysis, Reporting and action planning

Tools and techniques: interviews, surveys, document review, benchmarking, Internal vs. external audits, Ethical and legal issues in HR auditing.

Unit 3

11 hours

Applications of Human Resource Auditing in HR Functions: Talent acquisition and workforce planning, Training and development: cost-benefit analysis, Performance management and succession planning, Strategic decision-making based on human asset data, Role of Human Resource Auditing in employer branding and HR audits

Unit 4

12 hours

Integrating Human Resource Auditing with HRIS & HR Analytics: Data sources and systems (HRIS, payroll, ERP), Using analytics to enhance Human resource auditing models, Employee lifecycle value mapping using HR software, HR Scorecard and Balanced Scorecard applications, AI and automation in modern Human Resource Auditing systems

Case Studies, Best Practices & Future Trends: Indian companies using Human resource auditing (Infosys, BHEL, ONGC, NTPC), Global benchmarks (Google, Deloitte, SAP), Challenges in implementing Human Resource Auditing: ethical, legal, operational, Future of HRA: AI, ESG, DEI metrics, and human capital disclosure, National & international frameworks: SHRM, ISO 30414

Practical and Project Work

- HRA Portfolio Project: Select a functional department (e.g., Sales, HR, IT). Gather data (fictional or real) about employee experience, skills, tenure, and performance.
- Spreadsheet Analysis: Use mock HR data (employee turnover, training cost, appraisal scores). Apply formulas to calculate attrition rate, training ROI, and cost-per-hire.
- HR Audit Simulation: Choose one HR domain (e.g., recruitment, training, or payroll). Use an audit checklist to evaluate the process, compliance, and documentation.
- Live Interview with HR Leaders: Conduct an interview with an HR professional (from industry or academia) focusing on how people data is used in audits and decision-making.

- Case Study Presentation: Analyze a case (e.g., Infosys, NTPC, Google). Identify audit processes used, outcomes, and alignment with strategy.
- Role Play: HR Auditor vs. HR Manager: In pairs, perform a scripted interaction where one is an auditor and the other is an HR manager defending practices.
- Case Analysis: Read two HR audit case studies – one successful, one failed. Analyze causes, stakeholder responses, and recommendations.
- Balanced Scorecard Exercise: Use HR metrics to populate a Balanced Scorecard (Financial, Learning & Growth, Internal Processes, Customer).

Recommended Textbooks and References:

- McConnell, J. H. (2003). Auditing your human resources department: A step-by-step guide to assessing the key areas of your program (2nd ed.). AMACOM.
- Dessler, G. (2020). Human resource management (16th ed.). Pearson Education..
- Mathis, R. L., Jackson, J. H., Valentine, S. R., & Meglich, P. A. (2022). Human resource management (16th ed.). Cengage Learning.
- Dessler, G. (2020). Human resource management (16th ed.). Pearson Education.
- Pravin, D. (2023). Human resource management (3rd ed.). Pearson India.
- Biswas, S. (2020). Human resource planning and audit. Himalaya Publishing House.
- Rao, T. V. (2021). HR audit for business excellence. Vision: The Journal of Business Perspective, 25(3), 251–259. <https://doi.org/10.1177/09722629211007428>
- Sharma, R., & Sharma, N. (2019). Human resource audit and its impact on organizational performance. International Journal of Human Resource Management and Research, 9(2), 13–22. <https://doi.org/10.24247/ijhrmarapr20192>
- Khandelwal, A. (2018). HR audit as a strategic tool of human resource management. International Journal of Research in Humanities and Social Studies, 5(6), 1–6.

Bachelor of Arts (VS)- Human Resource Management

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -7.2(DSE-7.2)

PEOPLE ANALYTICS AND HR DATA SCIENCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
PEOPLE ANALYTICS AND HR DATA SCIENCE (DSE- 7.2)	4	3	0	1	12th Pass	-

Learning Objectives

- Understand the use of data to drive evidence-based HR decisions and improve organizational outcomes
- Develop skills to generate actionable insights for workforce planning
- Apply data-driven approaches to enhance talent management strategies
- Utilize analytics to improve employee engagement and organizational effectiveness

Learning Outcomes

Upon completion of the course, students will:

- Explain the role and value of people analytics in modern HRM.
- Differentiate between descriptive, predictive, and prescriptive analytics in HR contexts.
- Use statistical methods to analyze common HR datasets.
- Create dashboards or visualizations to communicate HR insights.
- Discuss ethical concerns related to privacy, bias, and data governance in people analytics.
- Design and present a simple HR analytics solution for a business problem.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1 Foundations of People Analytics & HR Data Science

11 Hours

Evolution from HR metrics to advanced people analytics, The business case and strategic importance of people analytics, Types of analytics: descriptive, diagnostic, predictive, prescriptive, HR functions empowered by analytics: recruitment, engagement, retention, etc., Data-driven HR mindset and analytics culture, Understanding key HR metrics and KPIs, Sources of HR data: internal systems, external benchmarks, Data quality: reliability, validity, and challenges in HR datasets, Limitations and ethical considerations in people analytics, Role in strategic workforce planning

Unit 2 HR Data Infrastructure, Tools & Governance

11 Hours

Introduction to HRIS and data architecture, HR data collection methods: surveys, sensors, digital tools, Data cleaning, Ensuring data privacy, security, and compliance (GDPR, DPDP), Introduction to Excel for HR analytics, Basics of R/Python for working with HR datasets, Visualization and dashboards using Power BI / Tableau, Integrating multiple data sources and managing silos, Data governance frameworks in HR analytics, Designing ethical and inclusive data strategies

Unit 3 Analytical Methods & Predictive Techniques

12 Hours

Descriptive statistics and HR data interpretation, Correlation, regression, and predictive modeling for HR decisions, Hypothesis testing and statistical significance in HR, Segmentation and clustering for workforce insights, Time series analysis for HR metrics like turnover, Visualization best practices for communicating HR insights, Building simple attrition or performance models, Avoiding biases, errors, and misinterpretation in analysis, Sentiment analysis and employee voice analytics

Unit 4 Strategic Applications, Ethics & Future of People Analytics

11 Hours

Talent acquisition, onboarding, and engagement analytics, L&D, performance, compensation, and pay equity analysis, DEI analytics and inclusive workplace strategies, Workforce planning and succession management, Measuring ROI and business impact of analytics, , Bias, fairness, and algorithmic accountability in HR AI tools, Ethical boundaries: monitoring vs. surveillance, Building responsible and sustainable analytics strategies

PRACTICAL:

- **HR Analytics in Action – A Case Simulation:** Give students a case scenario of a company with HR data (e.g., high attrition). Ask them to identify descriptive, diagnostic, predictive, and prescriptive insights based on the case.
- **Build Your HR Metrics Dashboard:** Provide sample HR data (e.g., recruitment funnel, employee engagement scores). Ask students build a simple Excel dashboard showing KPIs like time-to-fill, turnover rate, etc.
- **Data Cleaning Challenge:** Provide a messy HR dataset (e.g., missing values, duplicates, inconsistent formats). Ask students clean the data in Excel or Python, documenting steps taken.
- **Survey Design & Data Collection Roleplay:** Students design a 5-question employee engagement survey and conduct a mock survey in class.

- Visual Storytelling with Power BI or Tableau: Provide HR data (e.g., L&D program participation vs. performance). Students create dashboards with filters and charts in Power BI or Tableau.
- Sentiment Analysis from Employee Feedback: Provide a set of anonymized employee comments or Glassdoor reviews. Students use a simple Python tool or spreadsheet formulas to classify sentiment (positive, neutral, negative).

Reference books and Readings

Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M., & Stuart, M. (2016). *HR and analytics: Why HR is set to fail the big data challenge*. Human Resource Management Journal, 26(1), 1-11.

Boudreau, J. W., & Cascio, W. F. (2017). *The search for global competence: From international HR to talent management*. Journal of World Business, 52(2), 103-114.

Davenport, T. H., Harris, J. G., & Shapiro, J. (2010). *Competing on talent analytics*. Harvard Business Review, 88(10), 52-58.

Van den Heuvel, S., & Bondarouk, T. (2017). *The rise (and fall?) of HR analytics: A study into the future application, value, structure, and system support*. Journal of Organizational Effectiveness: People and Performance, 4(2), 157-178.

Marris, E. (2022). *People analytics for dummies*. Wiley.

LinkedIn Talent Solutions. (2023). *Global talent trends report*. Retrieved from <https://business.linkedin.com/talent-solutions/recruiting-tips/global-talent-trends>

World Economic Forum. (2023). *The future of jobs report 2023*. Retrieved from <https://www.weforum.org/reports/the-future-of-jobs-report-2023>

McKinsey & Company. (2021). *People analytics: Reimagining talent strategy*. Retrieved from <https://www.mckinsey.com>

Society for Human Resource Management (SHRM). (2022). *Ethical use of people analytics*. Retrieved from <https://www.shrm.org>

Bachelor of Arts (VS)- Human Resource Management

Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE -7.3 (DSE-7.3)

E-HRM and CLOUD- BASED HR SYSTEMS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
E-HRM and CLOUD- BASED HR SYSTEMS (DSE- 7.3)	4	3	0	1	12th Pass	-

Learning Objectives:

- Understand how digital technologies, especially electronic and cloud-based systems, are reshaping Human Resource Management (HRM)
- Explore the application of E-HRM tools across key HR functions such as recruitment, payroll, performance management, and employee engagement
- Develop technological fluency to effectively operate and manage E-HRM platforms and software

Learning Outcomes:

After the successful completion of this course, students will be able to:

- Explain the fundamental principles and strategic relevance of E-HRM and cloud-based HR solutions.
- Demonstrate the use of digital platforms and cloud-based tools for managing HR functions.
- Critically evaluate the effectiveness and limitations of E-HRM systems in organizational settings.
- Apply digital HR concepts to design or improve existing HR processes using appropriate tools and technologies.
- Interpret HR analytics dashboards and leverage data-driven insights for HR decision-making.
- Assess the impact of digital transformation trends like AI, mobile HR, and cloud computing on the HR profession.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1**10 hours**

Concept, Evolution and Importance of E-HRM, Traditional HRM vs E-HRM, Objectives and Types of E-HRM (Operational, Relational, Transformational), Benefits and Challenges in Implementing E-HRM, Role of IT in HR Transformation

Unit-2**12 hours****Core Functional Areas of E-HRM**

E-Recruitment: Tools, ATS (Applicant Tracking System), Job Portals, E-Selection and Online Testing, E-Learning & LMS (Learning Management Systems), E-Performance Management and Appraisal Systems, E-Compensation and Payroll Management, Self-Service Portals for Employees and Managers

Unit-3**11 hours****Cloud-Based HR Systems**

Introduction to Cloud Computing in HR, Types of Cloud Services: SaaS, PaaS, IaaS in HR, Benefits and Risks of Cloud-Based HR, Key Cloud-Based HRM Platforms (e.g., SAP SuccessFactors, Oracle HCM, Workday, Zoho People), Data Security, Privacy & Compliance in Cloud HR, Integration with other Enterprise Systems (ERP, CRM)

Unit-4**12 hours****Implementation & Trends in Digital HR**

Steps for Implementing E-HRM/Cloud HR Systems, Change Management and Employee Acceptance, HR Analytics and Dashboards, Mobile HRM and Artificial Intelligence in HR, Case Studies on Successful E-HRM/Cloud HR Implementation, Future Trends: Metaverse in HR, Virtual Reality for Training, Blockchain in HR

Practical:

- E-HRM Implementation Blueprint: Create an E-HRM implementation plan for a mid-sized company transitioning from traditional HR.
- Digital Recruitment Simulation using ATS & AI: Post a job on a mock job board, collect resumes, use ATS (e.g., Zoho Recruit), and AI tools for shortlisting.
- AI-Driven Job Description Generator: Use AI to generate job descriptions for 3 different roles (e.g., HR Manager, Data Analyst, Recruiter).
- Cloud HR Platform Comparison Study: Test trial/demo versions of at least 2 platforms (e.g., SAP SuccessFactors, Zoho People, Workday).
- HR Analytics Dashboard Project: Create an HR dashboard displaying KPIs like turnover rate, training hours, and employee engagement.
- Employee Self-Service (ESS) Portal Design: Map out features like leave application, payslip download, performance view. Create wireframes.
- Virtual HR Onboarding Using VR Tools: Design a virtual onboarding session for new hires using a VR platform.
- HR Chatbot Design Project: Create a chatbot that can answer FAQs on leave, holidays, and payroll.
- E-Learning Module Development: Develop a short employee training course (e.g., HR policies, POSH awareness).
- AI Tools in HR Research Report: Select 3 AI tools used in HR (e.g., HireVue, Pymetrics, ChatGPT), explore their use cases.

Recommended Textbooks and References:

1. Kavanagh, M. J., & Thite, M. (2018). *Human resource information systems: Basics, applications, and future directions* (4th ed.). Sage Publications. <https://us.sagepub.com/en-us/nam/human-resource-information-systems/book257758>
2. Torres-Coronas, T., & Arias-Oliva, M. (2009). *e-Human resources management: Managing knowledge people*. IGI Global. <https://doi.org/10.4018/978-1-59904-883-3>
3. Erl, T. (2013). *Cloud computing: Concepts, technology & architecture*. Prentice Hall. <https://www.informit.com/store/cloud-computing-concepts-technology-and-architecture-9780133387520>
4. Sen, S. (2021). *Digital HR strategy: Achieving sustainable transformation in the digital age*. Kogan Page. <https://www.koganpage.com/product/digital-hr-strategy-9781789665864>
5. Rao, V. S. P. (2020). *Human resource management: Text and cases* (4th ed.). Excel Books. ISBN: 9789387472946

Bachelor of Arts (VS)- Human Resource Management

Semester VIII

Discipline Specific Elective Course- 8.1

Artificial Intelligence in Human Resource Information System

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE INFORMATION SYSTEM (DSE- 8.1)	4	3	0	1	12th Pass	-

Learning Objectives:

- Explore the integration of Artificial Intelligence (AI) into Human Resource Information Systems (HRIS)
- Understand how emerging technologies are transforming traditional HR functions
- Examine AI's role in enhancing employee engagement and experience
- Develop practical skills to leverage AI-powered HRIS in strategic HR management

Learning Outcomes: Upon successful completion of this course, students will be able to:

- Examine the key concepts of AI and HRIS and explain their integration.
- Analyse AI-based tools and technologies used in HR practices such as recruitment, onboarding, performance management, and retention.
- Assess the benefits and limitations of incorporating AI in HRIS.
- Examine AI-driven solutions for real-world HR challenges using HRIS platforms.
- Evaluate the implications of AI deployment in HR in terms of ethics, bias, and employee privacy.
- Demonstrate the ability to interpret AI-generated HR data for strategic decision-making.
- explore innovative uses of AI in HRIS to align with organizational goals.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit-1

11 Hours

Fundamentals of AI and HRIS: Introduction to Artificial Intelligence (AI) and Machine Learning (ML), Evolution from Traditional HRIS to AI-enabled HRIS, HR 4.0 and Digital HR Transformation, Benefits of AI in HRIS: Automation, Accuracy, and Analytics

Unit-2

11 Hours

AI Applications Across HR Functions: Talent Acquisition: AI in Resume Screening, Chatbots, and Video Interviewing, Employee Onboarding: AI-based Personalization and Virtual Assistants, Learning and Development: Adaptive Learning Systems, Performance Management: Predictive Performance Analysis, Retention & Engagement: Sentiment Analysis & Predictive Attrition Modelling

Unit-3

11 Hours

AI Tools and Technologies in HRIS: Overview of AI-powered HR platforms: SAP SuccessFactors, Oracle HCM, Workday, Zoho People, Darwin box, Chatbots (e.g., Olivia, XOR), NLP & Text Mining in HR, AI in Workforce Planning and Scheduling, Predictive & Prescriptive HR Analytics

Unit-4

12 Hours

Data, Ethics, and Legal Considerations: AI and Data Privacy in HR (GDPR, Indian IT Act), Algorithmic Bias and Fairness in Hiring, Transparency, Explainability & Responsible AI, Legal & Ethical Framework for AI in HR Practices

Future Trends and Innovations: Generative AI in HR (e.g., using ChatGPT in HR tasks), Voice Assistants, Wearables, and IOT in HR, Gamification + AI for Talent Development, Case Studies of AI Implementation in HRIS across sectors

Practical:

- Comparative Study of AI-based HRIS Platforms: Analyze and compare platforms like SAP SuccessFactors, Oracle HCM Cloud, and Zoho People for their AI features.
- Resume Screening using AI: Collect 10–15 sample resumes (PDF or Word). Use an NLP-based model (e.g., spaCy, BERT) or ChatGPT to extract skills and match with a given job description.
- Building a Recruitment Chatbot: Use Dialog flow or Microsoft Bot Framework to design a chatbot including features like job posting queries, FAQs, and resume uploads.
- AI-based Training Recommendations: Use unsupervised learning (e.g., K-Means clustering) to segment employees. Recommend training using skill gap analysis.
- Building an AI-powered HR Dashboard: Create a dashboard showing key metrics: turnover, engagement, training ROI, etc.
- Ethics and Bias Testing in AI Recruitment: Test a recruitment algorithm on a dataset with gender/race labels. Identify and reduce bias using fairness-aware models.

Recommended Textbooks and References

Dessler, G. (2020). Human resource management (16th ed.). Pearson.

Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review*, 25(2), 216–231. <https://doi.org/10.1016/j.hrmr.2015.01.002>

Bondarouk, T., & Ruël, H. (2009). Electronic Human Resource Management: Challenges in the digital era. *The International Journal of Human Resource Management*, 20(3), 505–514. <https://doi.org/10.1080/09585190802707235>

Bissola, R., & Imperatori, B. (2019). *HRM 4.0: Digital transformation and the future of human resource management*. Emerald Publishing.

Minbaeva, D. (2021). Disruptive HRM: Bridging the gap between practice and academic research. *Human Resource Management Review*, 31(2), 100730. <https://doi.org/10.1016/j.hrmr.2020.100730>

Kavanagh, M. J., Thite, M., & Johnson, R. D. (2023). *Human resource information systems: Basics, applications, and future directions* (5th ed.). SAGE Publications.

Isson, J. P., & Harriott, J. S. (2016). *People analytics in the era of big data: Changing the way you attract, acquire, develop, and retain talent*. Wiley.

IBM Smarter Workforce Institute. (2020). *AI and the future of HR: Five technology imperatives*. IBM Corporation.

<https://www.ibm.com/downloads/cas/2ZEXLQXR>

Deloitte. (2021). *AI in HR: A step-by-step guide for HR leaders*. Deloitte Insights.

<https://www2.deloitte.com/insights>

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Semester VIII

DISCIPLINE SPECIFIC ELECTIVE COURSE -8.2 (DSE-8.2)

AI & TECH-ENABLED TALENT ACQUISITION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
AI & TECH-ENABLED TALENT ACQUISITION (DSE- 8.2)	4	3	0	1	12 th Pass	-

Learning Objective:

- Explore how artificial intelligence and emerging technologies are transforming talent acquisition
- Examine key tools used in tech-enabled hiring, such as Applicant Tracking Systems (ATS), AI screening, chatbots, and gamified assessments
- Understand ethical, legal, and Diversity, Equity, and Inclusion (DEI) considerations in AI-driven recruitment
- Develop the ability to critically assess and select appropriate HR tech platforms for talent acquisition
- Participate in practical sessions to gain hands-on experience with leading-edge HR

Learning Outcomes: Upon successful completion of this course, students will be able to:

- Students will be able to describe the evolution and current landscape of AI and technology in talent acquisition.
- Students will be able to identify and compare various AI and tech tools used in sourcing, screening, and selection.
- Students will critically evaluate the ethical, legal, and DEI implications of using AI in hiring.

- Students will design a basic tech-enabled talent acquisition strategy for a given organization or role.
- Students will analyse ROI metrics and strategic value of different TA technologies.
- Students will demonstrate introductory practical skills in using at least one AI/tech recruitment tool.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1: Technology Trends Transforming Talent Acquisition

11 hours

Evolution from manual recruitment to AI-driven systems, Applications and implications of AI in recruitment, Role of Robotic Process Automation (RPA) in hiring, Chatbots & conversational AI in candidate experience, Blockchain for verifying candidate credentials, Use of Virtual & Augmented Reality in interviews and onboarding, Predictive analytics and data-driven sourcing strategies, Social media and digital footprints in candidate screening, Gamification and AI-enhanced assessments, Future-ready skills for tech-savvy recruiters

Unit 2: Digital Platforms, ATS & AI-Driven Screening

11 hours

Overview of Applicant Tracking Systems (ATS), Core functions and customization of ATS platforms, AI-powered resume screening and shortlisting, Skill-matching algorithms and candidate-job fit analysis, Integrating ATS with HRIS and other tech stacks, Addressing bias and fairness in AI-based screening, Reporting, dashboards, and recruitment analytics, Legal and ethical frameworks for using ATS and AI tools, Role of human oversight in AI-based screening, Future innovations in ATS and talent filtering technologies

Unit 3: Digital Sourcing, Employer Branding & Engagement

12 hours

Digital sourcing strategies and channels, Social media and professional platforms in sourcing talent, Programmatic advertising and AI targeting in job ads, Building a digital employer brand and online presence, AI tools for managing and monitoring employer branding, AI-powered platforms for personalized candidate engagement, Designing intuitive and inclusive digital candidate experiences, Use of video, storytelling, and interactive media in branding, Privacy concerns and ethical sourcing practices, Emerging trends in sourcing and engagement technology

Unit 4: AI-Driven Assessments, Ethics & Strategic ROI

11 hours

AI-powered video and asynchronous interviews, Natural Language Processing (NLP) in candidate evaluations, Gamification, simulations, and immersive testing tools, Cognitive, behavioural, and personality AI assessments, Data privacy, consent, and algorithmic transparency, Bias mitigation, fairness, and explainable AI (XAI), Legal compliance (e.g., GDPR, DPDP) in recruitment tech, DEI-focused AI strategies and inclusive hiring, Measuring ROI of TA technology initiatives, Governance, oversight, and accountability frameworks.

PRACTICAL:

- **AI vs Human – Resume Screening Challenge:** Give each group 10 mock resumes and 3 job descriptions. Half the class manually screens and ranks candidates; the other half uses a **free AI-based screening tool** (or simulated rules via Excel). Compare selections, discuss differences and the **role of bias** and **automation**.
- **Chatbot Design for Candidate Experience:** Understand how AI improves candidate communication. Ask students to design a **recruitment chatbot conversation flow** for common candidate queries (e.g., job status, application steps).
- **Build Your Own Employer Brand on LinkedIn:** Learn how recruiters build digital employer presence. Students form teams and choose a company (real or fictional).
- **Predictive Analytics Simulation for Hiring:** Provide students a dataset with historical hiring info (e.g., experience, skills, assessment scores, attrition). Students build a simple predictive model using **Excel regression** or Python (optional).
- **AI Ethics & Bias Roleplay:** Explore ethical dilemmas in AI-based recruitment. Give teams different roles: HR, data scientist, legal counsel, DEI officer. Teams must debate, justify, and decide: “Do we continue using it?”

REFERENCE BOOKS AND READINGS

1. Eubanks, B. (2022). *Artificial intelligence for HR: Use AI to support and develop a successful workforce* (2nd ed.). Kogan Page.
2. Culshaw, T. (2022). *Talent intelligence: Use business and people data to drive organizational performance*. Kogan Page.
3. Leutner, F., Akhtar, R., & Chamorro-Premuzic, T. (2022). *The future of recruitment: Using the new science of talent analytics to get your hiring right*. Emerald Publishing.
4. Alder, M., & Dinnen, M. (2021). *Digital talent: Find, recruit and retain the people your business needs in a world of digital transformation*. Kogan Page.
5. McKinsey & Company. (2021). *Recruiting 2030: AI, automation, and the future of hiring*. Retrieved from <https://www.mckinsey.com>
6. LinkedIn Talent Solutions. (2023). *Global talent trends report*. Retrieved from <https://business.linkedin.com/talent-solutions/recruiting-tips/global-talent-trends>
7. World Economic Forum. (2023). *The future of jobs report 2023*. Retrieved from <https://www.weforum.org/reports/the-future-of-jobs-report-2023>
8. Society for Human Resource Management (SHRM). (2022). *Ethical and legal issues in AI-based hiring*. Retrieved from <https://www.shrm.org>

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Semester VIII

Discipline Specific Course 8.3 – (DSE 8.3) EMOTIONAL INTELLIGENCE AND MINDFULNESS AT THE WORKPLACE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
EMOTIONAL INTELLIGENCE AND MINDFULNESS AT THE WORKPLACE (DSE- 8.3)	4	3	0	1	12 th Pass	-

Learning Objective: This course is designed to equip student:-

- Equip students with the skills and tools to understand, develop, and apply Emotional Intelligence (EI) and mindfulness in modern workplaces
- Develop strategies for stress management and improving emotional well-being
- Apply EI and mindfulness concepts to organizational scenarios through case studies

Learning Outcomes: After the successful completion of this course, students will be able to:

- Demonstrate awareness of emotional intelligence models (e.g., Goleman, Mayer-Salovey) and their relevance to the workplace.
- Interpret personal EI assessment results using standardized tools and develop an individual improvement plan.
- Practice daily mindfulness techniques using apps and apply them in work and social scenarios.
- Use HR and well-being software (e.g., Headspace, CultureAmp, Moodpath, SAP SuccessFactors) to analyze emotional and mental health indicators.
- Design a basic EI or mindfulness intervention for employee engagement, stress reduction, or productivity enhancement.
- Critically evaluate the ROI and effectiveness of EI/mindfulness programs in organizational contexts.

- Demonstrate improved soft skills such as empathy, self-regulation, focus, and active listening through practical exercises and assignments.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

11 hours

Introduction to Emotional Intelligence (EI)

Concept and evolution of Emotional Intelligence, Components of EI: Self-awareness, Self-regulation, Motivation, Empathy, Social skills (Goleman's model), EI vs IQ vs Personality, Importance of EI in personal and professional life, The neuroscience of emotions and emotional intelligence, Case studies and self-assessment tools

Unit 2

11 hours

Emotional Intelligence in the Workplace

Role of EI in organizational settings, EI and leadership effectiveness, EI in team dynamics and conflict resolution, Application of EI in decision-making and problem-solving, EI in customer service, change management, and employee engagement, EI competencies in recruitment, training, and performance appraisal, Organizational strategies for developing EI

Unit 3

11 hours

Mindfulness: Concept and Practice

Meaning, origin, and benefits of mindfulness, Mindfulness-based stress reduction (MBSR), Techniques: Meditation, breath awareness, body scan, mindful communication, Neuroscience of mindfulness, Building focus, resilience, and emotional regulation through mindfulness, Daily mindfulness practices at the workplace

Unit 4

12 hours

Integrating EI and Mindfulness at Work

Synergy between EI and mindfulness, Creating mindful leadership and emotionally intelligent teams, Enhancing employee well-being, productivity, and work-life balance, Cultivating a mindful organizational culture, Tools and practices for embedding mindfulness and EI in HR practices, Workplace interventions and training programs, Case studies and organizational best practices

Practical:

- EI Self-Assessment & Reflection Report: Use an online EI self-assessment (e.g., Goleman's model), analyze results, and reflect on each EI component.
- AI-Powered Case Study Analysis: EI in Real Workplaces: Use AI summarizers to extract key insights from case studies (e.g., on Satya Nadella, Indra Nooyi), and identify EI elements.
- AI-Generated Emotional Intelligence Training Module: Use AI to generate training content, case scenarios, role plays, and reflection exercises.
- EI in Leadership – Role Simulation: Create and enact scenarios where leaders demonstrate EI in team conflicts or crisis. AI can help generate realistic dialogue.
- Mindfulness Practice Tracker and Journal: Maintain a 7–10 day mindfulness journal with reflections, stress levels, and observed benefits.
- AI-Generated Guided Meditation Scripts: Use AI to generate meditation or body-scan scripts tailored to employees facing stress or burnout.

- Emotional Regulation Dashboard: Track and graph personal mood data and coping techniques over a week.
- Designing a Mindful Leadership Program: Design a 1-day training program with modules on focus, empathy, and mindful communication.
- AI-Driven Organizational Culture Assessment: Create and distribute a workplace culture survey. Use AI to analyze open-text responses.

Recommended Textbooks and References:

Goleman, Daniel. *Emotional Intelligence: Why It Can Matter More Than IQ* Bantam Books, 2006. *(Foundational text introducing the concept of EI and its relevance in real-life scenarios.)*

Chopra, Deepak & Tanzi, Rudolph E. *The Healing Self: A Revolutionary New Plan to Supercharge Your Immunity and Stay Well for Life* Harmony, 2018. *(Links mindfulness and well-being to brain function and health.)*

Boyatzis, Richard & Goleman, Daniel. *Emotional Intelligence Competencies Inventory (EICI)* Korn Ferry Institute. *(Recommended for skill assessment and training design.)*

David, Susan. *Emotional Agility: Get Unstuck, Embrace Change, and Thrive in Work and Life* Penguin, 2016. *(A practical guide for developing emotional resilience and flexibility.)*

Kabat-Zinn, Jon. *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life* Hyperion, 2005. *(Classic book on mindfulness practice.)*

Notes:

BACHELOR OF ARTS (VS) SMALL AND MEDIUM ENTERPRISES

Bachelor of Arts (VS)- Small and Medium Enterprises

Semester VII

Discipline Specific Course 7.1 – (DSE 7.1)-Business Analytics for MSMEs

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
BUSINESS ANALYTICS FOR MSMEs (DSE 7.1)	4	3	0	1	12th Pass	NIL

Learning Objective: This course aims to equip students: -

- Equip students with knowledge and practical tools of Business Analytics tailored for MSMEs
- Enable learners to understand how data can inform business decisions
- Demonstrate how business analytics contributes to sustainable business growth in MSMEs

Learning Outcomes: After the completion of the course, the learners will be able to:

- Understand the role of Business Analytics in decision-making in MSMEs.
- Apply spreadsheet and R-based tools for data preparation, visualization, and analysis.
- Use statistical and predictive techniques to interpret real-time MSME data.
- Perform text mining and basic reporting relevant to MSME business contexts.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

10 Hours

Introduction to Business Analytics for MSMEs: Introduction to Data, Data Analytics, and Data Science. Business Analytics: Concepts, Evolution, and Application in MSMEs. Types of Analytics: Descriptive, Diagnostic, Predictive, and Prescriptive. Types of Data: Nominal, Ordinal, Interval, Ratio. Big Data and Business Intelligence in MSME context. Challenges and Opportunities in adopting Analytics for MSMEs.

Unit 2

11 hours

Data Analysis and Visualization: Data Cleaning and Preparation for MSMEs using Excel/Google sheets. Using Spreadsheet functions: Sort, Filter, Conditional Formatting, Text to Columns. Detecting Duplicates, Outliers, Missing Values. Visual Representation: Line graphs, Bar charts, Scatter plots, Histograms, Boxplots, Tree maps. Interactive Dashboards for MSME reports. Descriptive Statistics in excel: Central Tendency, Dispersion.

Unit 3

12 hours

Business Analytics Using R: Getting Started with R: Installation, RStudio, R Packages. R Syntax, Data Structures: Vectors, Lists, Data Frames, Matrices. Importing and Exporting Data: Excel, CSV, Web Data. Descriptive Analytics using R: Charts, Summary Stats, Tables. Case study: MSME data analysis using R

Unit 4

12 hours

Predictive Analytics and Textual Analysis for MSMEs: Regression Analysis (Simple & Multiple Linear Regression). Confidence Intervals, Significance Testing. Understanding Regression Coefficients, Heteroscedasticity, Multicollinearity. Introduction to Textual Analytics: Text Mining, Word Frequency. Sentiment Analysis for customer feedback in MSMEs. Using R for Text Analysis. Applications in marketing, customer service, and operations in MSMEs

Practical Exercises

Students are expected to perform hands-on tasks such as:

1. Data cleaning, summarization and visualization using spreadsheets (Power Query, Power Pivot, Charts, Dashboards).
2. Loading and preparing data in R; analysing data sets relevant to MSME sectors (sales, cost, inventory).
3. Building and interpreting regression models.
4. Conducting basic sentiment analysis on MSME customer reviews or social media feedback.
5. Designing dashboards or automated report templates for MSME decision-makers.

Suggested Readings

Dangi, H.K., Sharma, H., & Madan, M. (2023). Business Analytics. Cengage Learning India Pvt. Ltd

Gupta, Ruchi. (2021). Business Analytics: Concepts and Applications. Taxmann Publications Pvt. Ltd.

Kumar, U. Dinesh. (2017). Business Analytics: The Science of Data-Driven Decision Making. Wiley India Pvt. Ltd.

Vohra, N. D. – Business Statistics, McGraw Hill (for spreadsheet and regression techniques).

Singh, S.P. & Wadhwa, Pooja. (2022). Data Analytics. Vikas Publishing House.

Additional Readings and Resources

MSME Directorate (Govt. of India) – Case studies, reports, and data sources.

Government of India MSME Reports and Databases (<https://msme.gov.in>)

Websites like Kaggle, UCI Machine Learning Repository (for MSME-related datasets)

E-journals: International Journal of Business Analytics, Journal of Small Business Management

Online Courses: Coursera, edX (on R, Excel, Business Analytics)

Bachelor of Arts (VS)- Small and Medium Enterprises

Semester VII

Discipline Specific Elective- 7.2 (DSE-7.2)- E-Filing of GST and TDS Returns

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
E-FILING OF GST AND TDS RETURNS (DSE 7.2)	4	3	1	0	12 TH Pass	NIL

Learning Objective: Upon successful completion of this course, students will be able to:

- Explain the basic concepts and structure of Goods and Services Tax (GST) and Tax Deducted at Source (TDS).
- Interpret relevant provisions, rules, and updates for GST and TDS as per the latest Finance Acts.
- Demonstrate the practical steps involved in e-filing of GST returns (such as GSTR-1, GSTR-3B) using the GST Portal.
- Demonstrate the process for e-filing TDS returns (such as Form 24Q & 26Q) via appropriate government portals.

Learning Outcomes: After completing the course, the student shall be able to:

- Know the difference between e-filing and regular filing of Income tax returns and understand the circumstances when e-filing is mandatory.
- Understand the concept of advance payment of tax and tax deduction at source.
- Develop the ability of e-filing of TDS returns
- know about various types of GST returns and their filing.

Course Content

(Theory 45 hrs + Tutorial 15 hrs)

Unit 1

10 hours

Introduction to E-Filing and Digital Taxation: Concept and evolution of e-filing in India; Difference between e-filing and regular filing of returns; Advantages and challenges of e-filing versus manual filing; Legal framework and statutory requirements for e-filing; Types of e-filing: Online, assisted, and offline modes; Overview of the Income Tax and GST e-filing portals

Unit 2**11 hours**

TDS and e-Filing of TDS returns: Introduction to the concept of TDS; provisions in brief relating to advance payment of tax; schedule for deposit of TDS; schedule for submission of TDS returns; prescribed forms for filing of TDS returns; exemption from TDS – Form 13, 15G, 15H; Practical workshop on e-filing of TDS returns

Unit 3**12 hours**

GST Returns – Types and Procedures: Classification of GST returns: GSTR-1, GSTR-2A, GSTR-3B, GSTR-4, GSTR-9; Due dates, frequency, and statutory compliance; Detailed process for preparing and filing different GST returns; QRMP scheme and use of IFF (Invoice Furnishing Facility); Electronic ledgers: Cash, credit, and liability registers

Unit 4**12 hours**

Practical Aspects of E-Filing GST Returns: Step-by-step demonstration of e-filing GSTR-1 and GSTR-3B on the GST portal; Practical exercises and case studies on GST return filing; Common errors in e-filing and their remedies; Penalties for non-compliance and late filing

References

Bansal, K. M. (2023). *GST & customs law*. Taxmann Publications.

Ahuja, G., & Gupta, R. (2023). *Systematic approach to income tax including tax planning*. Bharat Law House.

Singhania, V. K., & Singhania, M. (2023). *Students' guide to income tax (University edition)*. Taxmann Publications Pvt. Ltd.

Sisodia, P. (2022). *GST law*. Bharat Law House.

Online Government Sources

- Goods and Services Tax Network (GSTN). (n.d.). *User manual and offline tools for GST return filing*. Retrieved from <https://www.gst.gov.in/help/returns>
- Income Tax Department, Government of India. (n.d.). *E-filing of TDS returns*. Retrieved from <https://www.incometax.gov.in/iec/foportal/help/tax-deducted-collected>
- Central Board of Direct Taxes. (2023). *TDS Reconciliation Analysis and Correction Enabling System (TRACES)*. Retrieved from <https://contents.tdscpc.gov.in>

Bachelor of Arts (VS)- Small and Medium Enterprises

Semester VIII

Discipline Specific Elective- 7.3 (DSE-7.3)- Green and Sustainable Business Practices in MSMEs

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Green and Sustainable Business Practices in MSMEs (DSE 7.3)	4	3	1	0	12TH PASS	NIL

Learning Objectives:

- Introduce the concept and importance of sustainability in business practices for MSMEs
- Enable students to identify and implement green technologies and energy-efficient methods
- Equip learners with knowledge of ESG (Environmental, Social, and Governance) goals and compliance strategies tailored for MSMEs
- Encourage real-world application through activities such as field visits, audits, and case-based learning

Learning Outcome:

- Students will understand sustainability fundamentals and their relevance in the MSME sector.
- Students will gain knowledge of green technologies applicable in MSME settings and government incentives available.
- Students will be able to analyze the sustainability of supply chains and understand carbon footprint reduction strategies.
- Students will understand ESG compliance and financing opportunities in the sustainable MSME ecosystem.

Course Content

(Theory 45 hrs + Tutorial 15 hrs)

Unit 1

10 hours

Introduction to Sustainability and MSMEs: Concept of Sustainable Development – Brundtland Report, SDGs; Triple Bottom Line: People, Planet, Profit; Need for sustainability in MSMEs: risks and opportunities; Environmental impact of small and medium enterprises; Role of MSMEs in achieving UN Sustainable Development Goals (SDGs); Global trends in sustainable business practices

Unit 2

11 hours

Green Technologies and Energy Efficiency in MSMEs: Introduction to green technologies: solar, wind, bioenergy, and water recycling; Retrofitting and upgradation of machinery for energy efficiency; Green manufacturing techniques; Environmental certifications: ISO 14001, Eco mark, Energy Star; Case studies: Clean energy MSMEs in India (e.g., solar startups, waste-to-energy SMEs); Barriers to adoption and government support schemes (MNRE, SIDBI Green Finance)

Unit 3

12 hours

Sustainable Supply Chains and Carbon Footprint Management :Meaning and importance of sustainable sourcing; Lifecycle thinking and product lifecycle analysis (LCA); Concepts of circular economy and zero-waste models; Packaging, logistics, and inventory management for sustainability; Tools for measuring and managing carbon footprint in MSMEs; Practical exposure: Using carbon calculators (e.g., GHG Protocol Tools)

12 hours

Unit 4

12 hours

ESG Framework and Compliance for MSMEs: ESG (Environmental, Social, Governance) principles explained; ESG rating systems and relevance for MSMEs (SEBI ESG Framework, BRSR for SMEs); Integrating social and ethical practices in business (Diversity, Labour Rights, Fair Trade); Green financing, sustainability-linked loans, and climate funds; Compliance and reporting requirements for MSMEs; Case studies: Indian MSMEs with ESG adoption (Tata Power Solar, Graviky Labs, etc.)

Suggested Readings & Resources

Elkington, J. (1999). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone Publishing.

United Nations. (1987). *Report of the World Commission on Environment and Development: Our common future (Brundtland Report)*. Oxford University Press.

Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). *Six transformations to achieve the sustainable development goals*. *Nature Sustainability*, 2, 805–814. <https://doi.org/10.1038/s41893-019-0352-9>

Rao, P., & Holt, D. (2005). *Do green supply chains lead to competitiveness and economic performance?*. *International Journal of Operations & Production Management*, 25(9), 898–916.

OECD. (2021). *Greening small and medium-sized enterprises: Taking stock of good practices*. OECD Publishing. <https://doi.org/10.1787/5f25f7fd-en>

Singh, A. K., & Singh, S. (2021). *Green finance and sustainable development: Challenges and opportunities in India*. New Century Publications.
Sustainability in SMEs:

1. ESG for MSMEs – India SME Forum & FICCI Reports
2. World Bank: Greening SMEs Toolkit
3. UNEP & CII Reports on Green Businesses
4. Government of India (MSME Sustainable ZED Certification Scheme)
5. Portal References:
 - <https://zed.msme.gov.in/>
 - <https://mnre.gov.in/>
 - <https://ghgprotocol.org/>

Bachelor of Arts (VS)- Small and Medium Enterprises

Semester VIII

Discipline Specific Elective- 8.1 (DSE-8.1)- Organizational Behaviour for Small and Medium Enterprises

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Organizational Behaviour for Small and Medium Enterprises (DSE-8.1)	4	3	1	0	12 th pass	NIL

Learning Objectives: Course will enable learner to:-

- Acquire an exhaustive understanding of the theory of organisational behaviour
- Analyze how organisational behaviour theories apply to contemporary organisations
- Increase understanding of the intricacies of interpersonal group dynamics
- Develop insight into competitiveness within and between groups and organisations

Learning outcomes: After completion of the course, learners will be able to:

- Understand the fundamental concepts and significance of organizational behaviour in the context of SMEs.
- Analyse individual and group behaviour to improve interpersonal relations and team effectiveness in small businesses.
- Recognise the importance of communication and motivation in an organisation.

- Evaluate organizational processes, manage change, and foster a positive work culture in SMEs.

Course Content

(Theory 45 hrs + Tutorial 15 hrs)

Unit 1

10 hours

Introduction to Organizational Behaviour in SMEs: Definition and Scope of Organizational Behaviour; Importance of OB for SMEs; Historical development and evolution of OB; Unique characteristics and challenges of SMEs; Role of management and leadership in SMEs; Impact of organizational structure and culture in small businesses

Unit 2

12 hours

Individual Behaviour in SMEs: Foundations of Individual Behaviour; Personality - Type A/B, Big five personality types, factors influencing personality; Attitude – concept, components, job related attitudes; Learning- concept, theories and reinforcement; Perception and emotions concept, perceptual process, factors influencing perception, perceptual errors and distortions; Beliefs and values - concept and types: terminal values and instrumental values.
12 hours

Unit 3

11 hours

Communication, Motivation and Leadership in SMEs: Communication – Understanding Communication; Persuasive communication; Communication styles; Transactional Analysis (TA), Johari Window. Motivation – Why people work; Need theories (Maslow's need hierarchy, ERG Theory, McClelland's Theory); Theory X and Theory Y, Two Factors Theory; Contemporary Theories of motivation Goal-setting Theory, Reinforcement Theory). Leadership - Concept and theories; Styles of leadership; Leadership continuum; Trait, Behavioural and Situational approach; Leadership grid; Contemporary leadership issue.

Unit 4

12 hours

Group Dynamics and Change Management: Formation of Groups; Group Behaviour - concepts, types- group norms, group roles, and group cohesiveness; Groups Vs Teams; Group decision making – process and types; Organisational conflict – nature, sources, and resolution strategies; Organisational culture- concept and determinants; Organisational change-importance, types of change, resistance to change, managing change; Stress- individual and organisational factors, prevention and management of stress.

Suggested Readings:

Pareek, U. (2014). *Understanding Organisational Behaviour*. Oxford University Press.

Singh, K. (2015). *Organisational Behaviour: Texts & Cases*, 3rd edn. India: Pearson.
Additional Resources Keywords: Organisational Theories, Personality, Values and Attitudes, Learning, Leadership, Conflict, Organisational Culture.

Robbins, S.P., & Judge, T.A. (2022). *Organizational Behaviour*. Pearson.

Luthans, F. (2021). *Organizational Behaviour: An Evidence-Based Approach*. McGraw-Hill.

Aswathappa, K. (2020). *Organizational Behaviour*. Himalaya Publishing House

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Semester VIII

Discipline Specific Elective- 8.2 (DSE-8.2)- Practical Aspects of Entrepreneurship in MSMEs

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Practical Aspects of Entrepreneurship in MSMEs (DSE-8.2)	4	3	0	1	12 th pass	NIL

Learning Objective: The objective of this course is to understand: -

- Significance of entrepreneurship as a tool for development
- Explore the operational and strategic aspects of managing MSMEs within the Indian business context.
- To foster practical decision-making and innovation in small business contexts.

Learning Outcomes: After the completion of the course, the learners will be able to:

- Analyse the entrepreneurial business environment
- Identify the organisational support provided to startups in an entrepreneurial context.
- Develop skills for financial planning and forecasting in entrepreneurial ventures
- Understand and prepare business plans and project report
- Integrate the theoretical knowledge with real-world entrepreneurial practice.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

11 hours

Entrepreneurial Business Environment and Technological Adaptation: Introduction to entrepreneurship, Dimensions of Entrepreneurship, Entrepreneurial Mindset and opportunity recognition, startup culture growth and developments with special reference to India (case studies), environmental analysis, role of entrepreneurship in economic development, Case studies of successful Indian and global startups, family business culture in India, succession planning, Relevant case studies. AI, Blockchain, IoT, FinTech, AR/VR in entrepreneurship, case studies in health-tech, ed-tech, Agri-tech, and fintech, Data privacy basics and startup risks, Ethical considerations in using digital platforms

Unit 2

11 hours

Organisation Assistance: Emerging forms of organising startups,- OPC, LLP, e-commerce model, network organisation, overview of Special Economic Zone ,Khadi and Village Industries Commission (KVIC), MSME, startup Environmental Clearance, prerequisite clearances for startups, Quality Standards with special reference to Indian and international standards specifications, overview of incentives , facilities and reliefs for startups (excise, income tax etc.), Modernisation assistance to small scale unit, Incentives and facilities to exports entrepreneurs

Unit 3

11 hours

Entrepreneurial Funding and Financial Planning: Private support system- angel investing, Venture capital, Private equity, crowd funding, bootstrapping, Business incubators, traditional sources of finance, Financial assistance by Government agencies, - NSIC, SIDO, SIDBI, SFC, Governmental Start-up schemes- Make in India, Startup India, Standup India, Recent initiatives from MUDRA, understanding basics of financial statements (balance sheet and income statement and cash flow analysis), budgeting, Challenges in accessing finance for startups and MSMEs

Unit 4

12 hours

Business plan and Project Report: Idea generation and Feasibility analysis, preparing a business plan, Components of a business plan: Executive summary, market analysis, product/service, operations, finance, strategy; Business Model Canvas (BMC), Risk analysis and sustainability, Pitch deck essentials and communication, persuasion and pitching to stakeholders, Aspects and Phases of a Project, Contents of a Project Report, Proforma of a Suggested Project Report for manufacturing and service MSMEs

Practical:

- Analyse the entrepreneurial business environment impacting the operations of a selected MSME
- Examine and present the major initiatives launched by the Government of India to support and promote MSMEs in a specific sector or business domain
- Evaluate and compare different sources of finance using real-life case studies
- Prepare a hypothetical business plan and project report including business idea, market analysis, funding strategy, operations plan, and financial projections.
- Evaluate the impact of recent technological innovations on the operations and competitiveness of MSMEs in the Indian market

Suggested Readings

Barringer, B.R., & Ireland, R.D. (2015). *Entrepreneurship*. Pearson.
Hisrich, R. D., Peters, M. P., Shepherd, D. A. (2023). *Entrepreneurship*. United Kingdom: McGraw-Hill Education.
Kimball, D. C., Lussier, R. N. (2020). *Entrepreneurship Skills for New Ventures*. United Kingdom: Taylor & Francis.
Scarborough, N., Cornwall, J. R. (2015). *Essentials of Entrepreneurship and Small Business Management*, eBook, Global Edition. United Kingdom: Pearson Education.
Kuratko, D. F. (2023). *Entrepreneurship: Theory, Process, Practice*. United States: Cengage

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Semester VIII

Discipline Specific Elective- 8.3 (DSE-8.3)- Startup Creation and Business Plan Development

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical		
Startup Creation and Business Plan Development (DSE-8.3)	4	3	0	1	12th pass	NIL

Learning Objectives: Upon completion, students should be able to:

- Model and analyse complex supply chain systems.
- Select and apply suitable optimization techniques for different supply chain challenges.
- Design and implement measures to optimize network design, inventory management, and transportation operations.
- Leverage analytics and digital tools to monitor performance, predict risks, and support decision-making in real-world supply chains

Learning Outcomes:

- Students will be able to understand how to identify viable business opportunities and analyse the startup environment.
- Students will be equipped to develop a basic business model using real-world examples and lean startup principles.
- Students will be able to independently create a full business plan suitable for funding or launch.
- Students will develop skills to pitch ideas convincingly and understand fundraising mechanics.

Course Content

(Theory 45 hrs + Practical 30 hrs)

Unit 1

12 hours

Introduction to Startups and Entrepreneurial Ecosystem: Meaning, definition, and evolution of startups; Differences between startup, MSMEs, and traditional businesses; Characteristics and mindset of successful entrepreneurs; Introduction to the startup ecosystem in India and globally; Key institutions: incubators, accelerators, angel networks, VCs, Startup India, SIDBI, Atal Innovation Mission; Understanding the startup life cycle: Ideation, Validation, MVP,

Launch, Growth, Exit; Techniques for identifying business opportunities- Trend analysis, SWOT analysis, PESTEL framework, Design Thinking overview, Problem-solution fit analysis.

Unit 2

12 hours

Business Model and Lean Startup Development : Value Proposition Design- understanding customer pain points and designing product/service fit; Customer Segmentation and Persona Building; Business Model Canvas (BMC): 9 building blocks- Key partners, Key activities, Value propositions, Customer relationships, Channels, Customer segments, Cost structure, Revenue streams, Key resources; Revenue generation models: Subscription, Transaction, Freemium, Licensing, etc.; Minimum Viable Product (MVP): Concept and development; Introduction to Lean Startup methodology; Pivoting and iterative feedback; Case Studies: Zerodha, Zomato, Paytm, or sector-based micro cases.

Unit 3

11 hours

Business Plan Creation: What is a Business Plan and why is it needed? Components of a business plan: Executive summary, Company description, Market research and competitor analysis, Product/Service offering, Sales and marketing strategies, Operational planning (Location, Supply Chain, Production), Organizational structure and team roles, Financial plan- Cost estimation, Break-even analysis, Projected profit & loss, Funding requirements and use of funds; Risk assessment and mitigation strategy; Legal formalities: business registration (Udyam, GST, FSSAI, etc.), intellectual property rights.

Unit 4

10 hours

Pitching and Fundraising for Startups: Introduction to startup funding stages (Bootstrapping, Angel, Seed, VC); Role of incubators and government schemes (e.g., MUDRA, CGTMSE); Types of funding and instruments (Equity, Debt, Convertible Notes); Understanding investor expectations; Structure and elements of a startup pitch deck- Problem, Solution, Market size, Product demo, Business model, Competitive advantage, Go-to-market strategy, Team, Financials and projections, Ask (funding requirement); Preparing and delivering an elevator pitch; Common questions asked by investors; Mock pitch session with peer review

Practical

- Each student/group must prepare a **detailed business plan** for a proposed or imaginary MSME/startup.

Suggested Readings :

Pinson, L. (2021). Anatomy of a business plan: A step-by-step guide to building a business and securing your company's future (8th ed.). Out of Your Mind... and Into the Marketplace.

Entrepreneur Press. (2015). Write your business plan: Get your plan in place and your business off the ground. Entrepreneur Media.

Barrow, C., Barrow, P., & Brown, R. (2021). The business plan workbook: A step-by-step guide to creating and developing a successful business (10th ed.). Kogan Page.

Curtis, V. (2022). *Creating a business plan for dummies* (3rd ed.). John Wiley & Sons.

Colwell, K. (2019). *Starting a business quickstart guide: The simplified beginner's guide to launching a successful small business, turning your vision into reality, and achieving your entrepreneurial dream*. ClydeBank Media LLC.

Schramm, C. J. (2018). *Burn the business plan: What great entrepreneurs really do*. Simon & Schuster.

BACHELOR OF ARTS (VS) **MARKETING MANAGEMENT AND** **RETAIL BUSINESS**

Semester VII

**DISCIPLINE SPECIFIC ELECTIVE COURSE -7.1 (DSE-7.1) ENTERPRISE
RESOURCE PLANNING**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE
COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre- requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
ENTERPRISE RESOURCE PLANNING (DSE- 7.1)	4	3	-	1	12th Pass	-

Learning Objective:

- Introduce students to the concept of Enterprise Resource Planning (ERP).
- Explain the importance and relevance of ERP in business operations.
- Familiarize students with various ERP software tools.
- Focus on the application of ERP software in marketing functions.
- Develop students' understanding of how ERP enhances efficiency and integration in marketing activities.

Learning outcomes: Students will be able to:

- Get the knowledge of selection and implementation of ERP and business process reengineering
- Develop basic understanding of ERP packages and framework
- Develop the knowledge of technical architecture of ERP systems
- Get understanding of ERP, supply chain management and SAP

Course Content **(Theory 45 Hours + 30 hours practical)**

UNIT 1 Introduction to ERP **10 hours**

Enterprise Resource Planning: Definition, Evolution of ERP, difference between integrated and traditional information systems, early and new ERP packages, overview of ERP packages, ERP products and markets, players and characteristics, benefits of ERP implementations, critical success factors, pitfalls, ERP for Marketing Managers: Strategic Role.

UNIT 2 ERP Framework **10 hours**

Opportunities and problems in ERP selection and implementation, ERP implementation, identifying ERP benefits, ERP architecture: Client-Server, Cloud ERP, Communication and networking facilities, distributed computing, concepts of business objects, distributed object.

UNIT 3 ERP modules

10 hours

ERP modules: Sales & Distribution, CRM, Inventory, Finance, Production, Integration of marketing functions with ERP. Role of ERP in Customer Relationship Management (CRM), Sales Forecasting and Campaign Management.

UNIT 4 Working with Popular ERP tools for Marketing

15 hours

Overview of software like SAP, Oracle, Odoo, Microsoft Dynamics, Zoho CRM software and their practical applications. Real-time data and marketing analytics through software introductions like Odoo or Zoho.

Business Intelligence (BI) and dashboards, Customer insights from ERP, Predictive analytics and personalization, create a marketing dashboard using ERP data (sample tools: Power BI, Tableau)

Practical

- Conduct a short research project by identifying a local company (retail, service, or manufacturing) and investigate whether it uses an ERP system. Find out which modules are in use—such as Sales, CRM, Inventory, or Finance—and how these modules support the company’s marketing or customer-related operations. Gather this information through a phone interview, email, or online research. Submit a short report (1–2 pages)
- Creating and tracking a marketing campaign: Hands-on with Odoo or Zoho CRM
- Design a comparison matrix: ERP software features for marketing: Students will select any three ERP tools (such as Odoo, Zoho CRM, and ERPNext) and compare them based on their marketing-related features. These may include lead management, campaign tools, customer segmentation, analytics, usability, and cost. Create a comparison matrix highlighting similarities and differences
- Engage in Group discussion or debate: “AI in ERP—A Game-Changer for Marketing?” or “Will AI replace marketing teams in ERP systems?”
- Plan ERP implementation steps for a marketing department: students will plan the implementation of an ERP system specifically for a company’s marketing department.

References:

- Jyothindra Zaveri (2012) Enterprise Resource Planning Himalaya Publishing House Pvt. Ltd.
- Motiwalla F. Luvai (2011) Enterprise Systems for Management 2 edition, Pearson.
- Gajjar, P., & Fayolle, A. (2022). *Odoo 15 development cookbook: Over 90 unique recipes to build effective enterprise and business applications, 5th edition*. Packt Publishing.

- Moss, G. (2021). *Working with Odoo 15: Configure, customize, and manage business operations with the latest Odoo ERP*. Packt Publishing.
- Bellu, R. (2018). *Microsoft Dynamics 365 for dummies*. Wiley
- Dominic, S. (2021). *Zoho CRM quickstart guide: The ultimate guide to implement Zoho CRM for your business*. Independently published
- Ptak, Carol A. & Eli Schragenheim (2000) *Enterprise Systems for Management*, St. Lucie Press NY.
- D.P. Goyal, *Enterprise Resource Planning*
- Mehta, R. (n.d.). *ERPNext functional training manual*. Frappe Technologies. Retrieved from <https://frappe.school/>

ERP Software for Practical Work:

- **Open Source:** Odoo, ERPNext
- **Commercial Trial Tools:** Zoho CRM, SAP Learning Hub (Student Access), Oracle NetSuite (educational version).

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Semester VII

**DISCIPLINE SPECIFIC ELECTIVE COURSE--7.2 (DSE-7.2) BUSINESS
RESEARCH METHODOLOGY IN MARKETING MANAGEMENT**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE
COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre- requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
BUSINESS RESEARCH METHODOLOGY IN MARKETING MANAGEMENT (DSE- 7.2)	4	2	-	2	12th Pass	-

Learning Objectives:

- Equip marketing students with fundamental knowledge of business research.
- Develop practical skills for conducting and interpreting research.
- Focus on marketing-specific applications of business research.
- Include research areas such as Consumer behavior, Brand perception, Marketing campaign evaluation
- Enable students to make data-driven marketing decisions through research insight

Learning outcomes: After completion of the course the learners will be able to:

- Explain the fundamentals of research, including types, process, key terminologies, and formulation of research questions and hypotheses.
- Design appropriate research methodology, including research design, sampling techniques, questionnaire development, and measurement scales.
- Apply SPSS for data cleaning, descriptive statistics, and hypothesis testing using parametric and non-parametric techniques.
- Interpret research findings, and prepare structured research reports following standard formats and referencing styles.
- Demonstrate understanding of ethical considerations in research, including plagiarism and the use of similarity-check tools.

Course Content

(Theory 30 Hours + 60 hours practical)

Unit 1: Introduction to Research

5 hours

Meaning, Scope and application of Research; Types of Research; Steps in Research Process; Terminologies of research: Concept, Construct, Variables, Meaning and Importance of Research in Marketing, Market Research, Consumer Insights, Branding, Product Testing

Literature Review, Research Gap and Formulation of Research Question; Framing a theoretical framework using established theories and models, Proposition and Hypothesis.

Unit 2: Methodology

5 hours

Research Design- Concept and Types, Measurement and Scaling; Scales for Measurements of Constructs, Reliability and Validity; Data Sources: Primary and Secondary Data; Questionnaire Design (online/offline); Sampling Techniques: Probability and Non-Probability, Sample Size Determination.

Unit 3: Data Analysis

10 hours

Data Entry and Cleaning; Visualizing Marketing Data: Graphical Presentation of Data; Preparing Descriptive Statistics; Steps in Hypothesis Testing; Hypothesis Testing- parametric (z test, t- test, Anova, linear and multiple regression, etc.) and non-parametric (chi- square test) using SPSS/EXCEL.

Unit 4: Interpretation and Report Writing and Ethics

10 hours

Steps in Report Writing, Layout of the Research Report: Preliminary Pages (title page, certificate, acknowledgement, table of contents, list of tables, list of figures, etc.), Main Text: (Introduction, Literature Review and hypothesis, methodology, results & findings, implications of the results, summary), End Matter (Appendices and Bibliography);

Presentation of Report, referencing (APA, Chicago, MLE, etc.), Ethics in Business Research, Guidelines on plagiarism, brief introduction to the software to check similarity Index.

Practical: The learners are required to:

- Identify a recent marketing problem and frame a research question and hypothesis
- Choose a marketing research topic such as "Impact of Influencer Marketing on Brand Loyalty" or "Customer Perception of Eco-Friendly Packaging." Search for 3–5 scholarly articles or reports related to your topic. Summarize the key findings from each and identify the research gaps. Based on your review, formulate a clear research question and hypothesis.
- Prepare literature review from a topic of your choice involving marketing research concepts such as consumer satisfaction, perception, brand engagement, brand loyalty: download research papers from Scopus/ABDC indexed Journals. Perform a review of literature. Frame a conceptual model based on the research gaps.
- Design a structured questionnaire on a marketing topic like customer satisfaction with a retail chain or brand awareness among college students. Include at least 12–15 questions: 2 demographics, 3–5 Likert scale, 2 multiple-choice, and 2 open-ended questions. Ensure questions are unbiased and clear. Pilot test the survey with 5 peers and ask for feedback on clarity. Submit your final questionnaire along with a brief note (100–150 words) explaining the logic behind your question types and structure.
- Design a short marketing research survey (8–10 questions) to study consumer preferences for a product category (e.g., mobile phones, clothing, or food delivery

apps). Use Google Forms or Microsoft Forms to collect responses from at least 15 individuals. After collecting data, export the responses to Excel or SPSS. Clean the data, calculate basic descriptive statistics (mean, median, mode), and perform a t-test or chi-square test to explore any significant differences (e.g., preference based on gender or age group).

- Prepare a one-page summary of your findings, including one chart, and submit both the dataset and summary report.

References

- Bryman, A., Bell, E., & Harley, B. (2022). *Business research methods*. Oxford University Press.
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods*. (12th ed.). New York, United States: McGraw Hill International Edition.
- Denzin Norman K., and Lincoln Yvonna S., (2018). *The Sage Handbook of Qualitative Research*. Sage Publications, Inc. (5th ed.)
- Greene, W. H. (2017). *Econometric Analysis*. Pearson Pvt. Limited
- Malhotra, N. K. (2020). *Marketing research: An applied orientation* (7th ed.). Pearson Education Limited.
- Neuman, W.L., (2014). *Social Research Methods: Qualitative and Quantitative Approaches*, Pearson Education Limited.
- Saunders, M., Lewis, P., & Thornhill, A. (2015). *Research methods for business students* (7th ed.). Pearson Education Limited.
- Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). John Wiley & Sons.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods*. (9th ed.). South Western: Cengage Learning.

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Semester VII

DISCIPLINE SPECIFIC ELECTIVE COURSE - -7.3 (DSE-7.3) SALES AND SERVICE EXCELLENCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
SALES AND SERVICE EXCELLENCE (DSE- 7.3)	4	3	-	1	12th Pass	-

Learning Objective:

- Enable students to understand the fundamental concepts of sales and service excellence.
- Help students identify and analyse customer needs.
- Teach students to tailor sales strategies based on customer analysis.
- Develop effective sales communication skills.
- Build strong negotiation skills for successful sales outcomes.

Learning outcomes: Students will be able to:

- Demonstrate an understanding of the key principles and theories related to sales and service excellence.
- Evaluate customer needs and preferences to design customized sales approaches.
- Employ effective communication and persuasion techniques to close sales successfully.
- Apply relationship-building strategies to retain existing customers and attract new ones.
- Address customer complaints and conflicts with empathy and professionalism.
- Utilize data-driven insights to optimize sales strategies and performance.
- Exhibit ethical behaviour and integrity in all sales and service interactions.

Course Content

(Theory 45 Hours + 30 hours practical)

UNIT 1

10 hours

Introduction to Sales and Service Excellence: Definition and importance of sales and service excellence, Historical perspectives and current trends in sales and customer service, Understanding Customer Behaviour, Customer psychology and decision-making processes, Customer segmentation and targeting strategies.

UNIT 2

10 hours

Sales Communication and Negotiation Skills: Effective communication techniques in sales,

Negotiation strategies to reach win-win outcomes, Customer Relationship Management (CRM), Building and maintaining customer relationships, CRM tools and technology.

UNIT 3

15 hours

Handling Customer Complaints and Challenging Situations: Dealing with difficult customers, Conflict resolution and problem-solving techniques

Data Analytics in Sales and Service, utilizing data to make informed sales decisions, Introduction to Customer analytics and predictive modelling.

UNIT 4

10 hours

Upselling and Cross-selling Strategies: Identifying upselling and cross-selling opportunities, Techniques for suggestive selling, Ethics and Integrity in Sales and Service, Importance of ethical behavior in sales and customer service, Ethical dilemmas and their resolutions.

Reference

- Tracy, B. (2006). *The psychology of selling: Increase your sales faster and easier than you ever thought possible*. Thomas Nelson.
- Gitomer, J. (2007). *Customer satisfaction is worthless, customer loyalty is priceless: How to make customers love you, keep them coming back, and tell everyone they know*. Bard Press.
- Pink, D. H. (2012). *To sell is human: The surprising truth about moving others*. Riverhead Books.
- Dixon, M., & Adamson, B. (2011). *The challenger sale: Taking control of the customer conversation*. Portfolio/Penguin.
- Mehta, N., Steinman, D., & Murphy, L. (2016). *Customer success: How innovative companies are reducing churn and growing recurring revenue*. Wiley.
- Kumar, V., & Reinartz, W. (2018). *Customer relationship management: Concept, strategy, and tools* (3rd ed.). Springer.
- Siegel, E. (2013). *Predictive analytics: The power to predict who will click, buy, lie, or die*. Wiley.

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Semester VII

**DISCIPLINE SPECIFIC ELECTIVE COURSE - 7.4 (DSE-7.4) INTEGRATED
MARKETING
COMMUNICATION CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-
REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
INTEGRATED MARKETING COMMUNICATION (DSE- 7.4)	4	3	1	-	12th Pass	-

Learning Objectives:

- Equip students with a comprehensive understanding of marketing communication tools, including Advertising, Public relations, Sales promotion, Digital marketing, Personal selling, Direct marketing
- Emphasize the importance of integrating these tools to form a unified communication strategy.
- Teach students how to plan, construct, and execute integrated marketing campaigns.
- Focus on maintaining consistency in brand messaging across multiple channels.
- Develop the ability to create effective and cohesive marketing communication strategies.

Learning Outcomes: Students will be able to:

- Understand the Concept of Integrated Marketing
- Recognize the Components of an Integrated Marketing Strategy
- Analyze Customer-Centric Marketing
- Develop Integrated Marketing Communication Plans
- Evaluate and Measure IMC Effectiveness
- Apply Integrated Marketing in Real-World Business Contexts
- Understand Legal, Ethical, and Cultural Issues
- The students will develop
- Strategic Thinking
- Cross-functional Collaboration

Course Content

(Theory 45 Hours + 15 hours tutorial)

Unit 1: Understanding Integrated Marketing Communication**10 Hours**

Introduction: Meaning, Features of IMC, Evolution of IMC, Reasons for growth of IMC, IMC planning process; Communication Response Models: Basic Model of Communication,

Traditional Response Hierarchy Models, Alternative Response Hierarchy Models; Establishing Objectives and Budget for marketing programs: Determining IMC objectives, Marketing vs Sales vs Communication objectives, DAGMAR, Budget approaches for promotion communication

Unit 2: Elements of IMC-I**10 hours**

Advertising: Meaning and Features, Evolution, Limitation, Classification of Advertising, Special Purpose Advertising- Green Advertising, Pro-bono Advertising, Rural Advertising. Advertising Regulation-ASCI, Doordarshan Code; Sales Promotion: Meaning, Reasons for growth, Limitations, Sales Promotion Abuse, Major Techniques of Sales Promotion at different level- Consumer, Dealer, Sales force; Direct Marketing: Meaning, Role of Direct Marketing in IMC, Advantages and Disadvantages, Direct Marketing Techniques.

Unit 3: Elements of IMC-II**15 hours**

Public Relations and Publicity: PR-Meaning, Marketing Public Relation (MPR) and its importance in Integrated Marketing Program, Advantages and Disadvantages, Process, Tools of PR. Publicity- Meaning, Characteristics, Sources of Publicity, Importance; Personal Selling: Meaning, Types of Sales Persons, Personal selling responsibility, skill set required for effective selling; Sponsorship: Meaning, Criteria for Sponsorship, Limitation, Event Sponsorship, Cause Sponsorship, Ambush Marketing-Concept, Impact.

Unit 4: Creative Aspects, Ethics and Evaluation in Marketing Communication 10 hours

Creative Aspects in Marketing Communication: Concept and Importance of Creativity, Visualization-Techniques, Buying Motives-Types, Selling Points-Types, Appeals-Types, USP; Ethics in Marketing Communication: Targeting Vulnerable group, Stereotyping, Portrayal of Women, Unethical Practices in Marketing Communication, Social and Cultural consequences; Evaluation in Marketing Communication: Evaluation process of IMC, Testing of Advertising, Effectiveness-Post Tests, copy testing – emotional reaction test, cognitive neuroscience –online evaluation, Behavioural Evaluation – sales and response rate, POPAI, Toll free numbers, QR codes and Facebook likes, response cards, Internet responses, redemption rate.

Reference:

- Belch, M., & Belch, G. (2021). *Advertising and promotion: An integrated marketing communication perspective* (12th ed.). Tata McGraw Hill.
- Belch, M., & Belch, G. (2010). *Advertising and promotion: An integrated marketing communication perspective*. Tata McGraw Hill.
- Clow, K. E. (2014). *Integrated advertising, promotion, and marketing communication*. Pearson Education.
- Duncan, T. (2006). *Principles of advertising and IMC*. Tata McGraw Hill.
- Dutta, K. (2016). *Integrated marketing communication*. Oxford University Press.
- Shah, K., & D'Souza, A. (2017). *Advertising and promotions: An IMC perspective*. McGraw Hill Education.

- Gopalakrishnan, P. S. (2008). *Integrated marketing communication: Concepts and cases*. ICFAI University Press.
- Shimp, T. (2007). *Advertising and promotion: An IMC approach*. Cengage Learning

B.A. (VS) Marketing Management and Retail Business

Semester VIII

**DISCIPLINE SPECIFIC ELECTIVE COURSE -8.1 (DSE-8.1) RETAIL
TECHNOLOGY AND INNOVATION**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE
COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre- requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
RETAIL TECHNOLOGY AND INNOVATION (DSE- 8.1)	4	2	-	2	12 th Pass	-

Learning Objective: Upon completion of this course, students will be able to:

- Understand the significance of retail technology and innovation in modern business environments.
- Analyze the impact of retail technology on consumer shopping behavior.
- Evaluate various technologies and tools used in the retail sector.
- Explore the challenges and opportunities of implementing retail technology across different retail formats.

Learning Outcomes: Students will be able to:

- Articulate the role of technology and innovation in shaping the retail industry.
- Critically analyse the influence of retail technology on consumer behavior and preferences.
- Identify and apply appropriate retail technologies for specific retail formats and business models.
- Evaluate the impact of digitalization on the supply chain and inventory management in retail.
- Develop effective strategies to address ethical and privacy challenges associated with retail technology.

Course Content

(Theory 30 Hours + 60 hours practical)

UNIT 1 Introduction to Retail Technology and Innovation

5 hours

Retail Technology and Innovation: Definition and scope of retail technology, The role of innovation in the retail industry, Historical overview of retail technology adoption, Online shopping trends and preferences, The psychology of online buying decisions, Impact of mobile technology on consumer behavior.

UNIT 2 Key Technologies Shaping Retail

5 hours

Key Technologies Shaping Retail: Artificial Intelligence and machine learning applications in retail, Internet of Things (IoT) and smart retail solutions, Augmented Reality (AR) and Virtual Reality (VR) in retail.

RFID and inventory tracking systems, Demand forecasting and supply chain optimization, Automation in warehousing and fulfilment centres

UNIT 3 Working with Retail Data and Ethical concerns

5 hours

Retail Data Analytics: Meaning, importance, types, benefits, tools. Utilizing data analytics for personalized marketing, Customer segmentation and targeting strategies.

Ethical Considerations in Retail Technology: Data privacy and security issues, impact of technology on employment in the retail sector, Sustainable and responsible retail practices, Integrating Technology for Enhanced Customer Experience, Mobile apps and in-store technology, Virtual shopping experiences and interactive displays, Loyalty programs.

UNIT 4 Introduction to Data Visualization & Tableau

15 hours

Importance of data visualization in marketing and retail, Overview of Tableau: Interface, versions, and use cases, Connecting to data sources (Excel, CSV), Basic charts: bar, line, pie, text tables.

Working with Retail Data: Understanding data fields: Measures vs. Dimensions, Filtering and sorting data, Grouping, hierarchy, and drill-downs, Using calculated fields (e.g., profit margin, AOV, Customer segmentation (region, segment, demographics), KPIs in marketing: CLV, CAC, ROAS (basic representation)

Custom dashboards using Tableau/Power BI with inclusions such as Sales Overview: Total sales, profit, and quantity sold, Sales trend over time (monthly or quarterly), Product Performance: Top-selling products or categories, Profit by product category/sub-category, Customer Insights: Sales by customer segment or region, New vs. returning customers (if data available), Marketing Metrics (Optional for basic version): Campaign ROI or source/channel performance (if applicable), Geographical Map: Sales by state or region (use filled map).

Practical: The learners are required to:

- Use a basic AR app (like IKEA Place, UrbanLadder, etc.) and reflect on how it affects customer experience.
- Research and present 3 companies that are using AR/VR experience in retail comparing customer engagement benefits and prepare a report on the same.
- Familiarising students with the Tableau software and its uses to a firm in retail operations and marketing.

- Create a bar chart showing Sales by Product Category, Add Labels and sort by highest sales, create a pie chart showing Sales by Region, Export your sheet as an image.
- Create a line chart showing Monthly Sales Trend, add a filter for Region and Product Category, use a hierarchy (Category → Sub-Category) and enable drill-down, Display Total Profit using a KPI card or text table.
- Create a bar chart showing Sales by Customer Segment, Add Profit Margin as a calculated field and visualize it, create a map showing Sales by State, Add filters for Order Date Range and Segment.

References

- Bardiya, A. (2019). *The tech whisperer: On technology and retail*. Penguin Random House India.
- Kumar, A. (2020). *Digital retailing in India: Evolution or revolution*. Notion Press.
- Stephens, D. (2013). *The retail revival: Reimagining business for the new age of consumerism*. Wiley.
- Stone, B. (2013). *The everything store: Jeff Bezos and the age of Amazon*. Little, Brown and Company.

B.A. (VS) Marketing Management and Retail Business

Semester VIII

DISCIPLINE SPECIFIC ELECTIVE COURSE – 8.2 (DSE-8.2) GOODS AND SERVICES TAX (GST)

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
GOODS AND SERVICES TAX (GST)- (DSE 8.2)	4	3	1	-	12th Pass	-

Learning Objectives: The course aims to:

- Impart knowledge of the principles and provisions of GST (Goods and Services Tax).
- Enable students to apply GST concepts and provisions in practical scenarios.

Learning Outcomes: Students will be able to:

- Analyse the rationale for introducing GST and comprehend the registration procedure and tax structure.
- Interpret the meaning of “Supply”, differentiate between intra-state and inter-state supply, provisions related to place and time of supply and compute the value of supply.
- Evaluate the utilization of input tax credit and the provisions of reverse charge mechanism.
- Analyse various returns under GST and payment of taxes.

Course Content (Theory 45 Hours + 15 hours Tutorials)

Unit 1: Structure, Registration and Exemptions 10 hours

Pre-Structure: Constitutional framework of indirect taxes before GST.

Introduction of GST: 101st Constitutional Amendment and its relevance; Rationale for GST; Structure of GST (SGST, CGST, UTGST & IGST); GST Council.

Registration provisions.

Unit 2: Levy and Collection of GST 10 hours

Supply: Scope of ‘Supply’; Inter-State and Intra-State supply; Classification of goods and services; Composite and Mixed supplies;

Levy of GST: Place of supply; Time of supply; Value of supply.

Unit 3: Input Tax Credit and Reverse Charge Mechanism

15 hours

Input Tax Credit: Eligible and ineligible input tax credit; Apportionments of credit; Blocked credits; Tax credit in special circumstances.

Reverse Charge Mechanism.

Unit 4: Tax Invoice, Returns and Payment of Tax

10 hours

Invoice and documents: Tax Invoices, Credit notes and debit notes; E-way bills.

Payments: Returns; Payment of taxes.

Note: In case of any subsequent notifications/amendments regarding GST or customs law by the government, the syllabus would be updated accordingly.

Practical: The learners are required to:

- Fill a mock GST REG-01 form and identify the documents required for different types of taxpayers.
- Prepare a classification report of any 10 real life goods or services along with their GST rates. Use the official website of Government of India for current rates.
- Refer to daily invoices to differentiate between intra-state and inter-state supply and provisions related to place of supply.
- Identify the eligible and ineligible tax credit under various circumstances.
- Enlist the process of returns under GST and payment of taxes by different types of taxpayers.

References:

- Ahuja, G., & Gupta, R. *GST & customs law*. Delhi, India: Flair Publications Pvt. Ltd.
- Babbar, S., Kaur, R., & Khurana, K. *Goods and services tax (GST) and customs law*. Delhi, India: Scholar Tech Press.
- Balachandran, V. Indirect taxation. *Goods and service tax and customs law*. Delhi, India: Sultan Chand & Sons.
- Balachandran, V. *Textbook of GST & customs law. (2nd ed.)*. Delhi, India: Sultan Chand & Sons.
- Bansal, K. M. *GST & customs law*. Delhi, India: Taxmann Publication.
- Gupta, S.S. *GST- how to meet your obligations*. Delhi, India: Taxmann Publications.
- Mittal, N. *Goods & services tax and customs law*. Delhi, India: Cengage Learning India Pvt. Ltd.
- Sahi, S. *Concept building approach to goods and services tax (gst), & customs law*. Delhi, India: Cengage Learning India Pvt. Ltd.
- Singhanian, V. K., & Singhanian, M. *Students' guide to income tax. (university ed.)*. Delhi, India: Taxmann Publications Pvt. Ltd.

Semester VIII

DISCIPLINE SPECIFIC ELECTIVE COURSE –8.3- (DSE 8.3) SUSTAINABLE AND ETHICAL RETAILING

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
SUSTAINABLE AND ETHICAL RETAILING DSE 8.3	4	3	1	-	12 th Pass	-

Learning Objective: The course aims to:

- Enable students to develop an in-depth understanding of the concepts, principles, and practices of sustainability and ethics in retail.
- Evaluate the role of responsible retailing in building a sustainable future.

Learning Outcomes: Students will be able to:

- Define sustainable and ethical retailing and explain their importance in the modern global marketplace.
- Assess the environmental and social impacts of retail operations and identify sustainable retail practices.
- Recognize the ethical issues in retail and evaluate strategies to manage them responsibly.
- Analyze real-world cases and propose solutions that align retail strategy with sustainability goals and ethical standards.

Course Content

(Theory 45 Hours + 15 hours Tutorial)

Unit 1: Introduction to Sustainable and Ethical Retailing

10 hours

Concepts of sustainability and ethics in retail, Triple Bottom Line: People, Planet, Profit, Evolution of sustainable practices in the retail industry, Ethical sourcing, fair trade, and green retailing, Regulatory frameworks and global standards (e.g., UN SDGs, ISO 26000)

Unit 2: Sustainable Retail Practices and Supply Chain

12 Hours

Environmental impacts of retail operations, Green store design, energy efficiency, and waste management, Ethical supply chain management and traceability, Role of technology in sustainable retail (AI, IoT, Blockchain), Case studies on sustainable brands and practices (e.g., Patagonia, IKEA, FabIndia)

Unit 3: Ethical Issues and Corporate Social Responsibility (CSR) in Retail 10 hours

Labour rights, fair wages, workplace safety, Consumer rights and ethical marketing, CSR strategies and community engagement, Governance and ethical leadership in retail, Evaluating CSR impact and reporting (e.g., ESG reporting)

Unit 4: Strategic Integration and Future Trends 13 hours

Integrating sustainability into retail strategy and brand positioning, Green consumerism and changing consumer expectations, Challenges in implementing ethical practices, Role of innovation and entrepreneurship in ethical retail, Emerging trends: circular economy, zero-waste stores, second-hand retail.

Practical : The learners are required to:

- Learners will analyze case studies of global/local retailers who implemented sustainable practices. They will evaluate the strategy, outcomes, and challenges.
- Students will conduct a sustainability audit of a nearby retail store or brand (online/offline) and suggest improvements.
- Role-play activities simulating common ethical conflicts in retail (e.g., pricing, labour conditions, greenwashing). Students will propose and defend resolutions.
- Students will work in teams to design a hypothetical sustainable and ethical retail business, covering store design, sourcing, marketing, and CSR.

References

- Goworek, H., & McGoldrick, P. (2015). *Retailing in a Sustainable World*. Routledge.
- Jones, P., Comfort, D., & Hillier, D. (2013). *Sustainability in Retail: An Overview*. Palgrave.
- Hethorn, J., & Ulasewicz, C. (2018). *Sustainable Fashion: What's Next?*. Bloomsbury.
- Solomon, M. R. (2020). *Consumer Behavior: Buying, Having, and Being*. Pearson.
- Bansal, P. (2021). *Sustainability: A Systems Approach*. Oxford University Press.
- Crane, A., & Matten, D. (2019). *Business Ethics: Managing Corporate Citizenship and Sustainability*. Oxford University Press.
- Porter, M. & Kramer, M. (2011). *Creating Shared Value*. Harvard Business Review.

BACHELOR OF ARTS (VS) MODERN **OFFICE MANAGEMENT**

Bachelor of Arts (VS)- Modern Office Management

Semester VII

Discipline Specific Course – 7.1- (DSE 7.1) Business Research Methodology

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Business Research Methodology DSE (7.1)	4	2	0	2	Class XII	Nil

Learning Objectives:

- To inculcate research aptitude among learners.
- To equip students with the knowledge and skills necessary for conducting research.
- To enable learners to understand and undertake the various steps in the research process effectively.

Learning outcomes: After completion of the course the learners will be able to:

- Explain the fundamentals of research, including types, process, key terminologies, and formulation of research questions and hypotheses.
- Design appropriate research methodology, including research design, sampling techniques, questionnaire development, and measurement scales.
- Apply SPSS for data cleaning, descriptive statistics, and hypothesis testing using parametric and non-parametric techniques.
- Interpret research findings, and prepare structured research reports following standard formats and referencing styles.
- Demonstrate understanding of ethical considerations in research, including plagiarism and the use of similarity-check tools.

Course Content

(Theory 30 Hours + 60 hours Tutorials)

Unit 1: Introduction and Literature Review

5 hours

Meaning, Scope and application of Research; Types of Research; Steps in Research Process; Terminologies of research: Concept, Construct, Variables, Literature Review, Research Gap and Formulation of Research Question; Framing a theoretical framework using established theories and models, Proposition and Hypothesis.

Unit 2: Methodology

5 hours

Research Design- Concept and Types, Measurement and Scaling; Scales for Measurements of Constructs, Reliability and Validity; Sources of Primary and Secondary Data; Questionnaire Design (online/offline); Probability and Non-Probability Sampling Techniques; Sample Size Determination.

Unit 3: Data Analysis Using SPSS

10 hours

Data Cleaning; Graphical Presentation of Data; Preparing Descriptive Statistics; Steps in Hypothesis Testing; Hypothesis Testing- parametric (z test, t- test, Anova, linear and multiple regression, etc.) and non-parametric (chi- square test).

Unit 4: Interpretation and Report Writing and Ethics

10 hours

Steps in Report Writing, Layout of the Research Report: Preliminary Pages (title page, certificate, acknowledgement, table of contents, list of tables, list of figures, etc), Main Text: (Introduction, Literature Review and hypothesis, methodology, results & findings, implications of the results, summary), End Matter (Appendices and Bibliography);

Presentation of Report, Referencing (APA, Chicago, MLE, etc.), Ethics in Business Research, Guidelines on plagiarism, brief introduction to the softwares to check similarity Index.

Practical: The learners are required to:

- Identify and select research problem related to office management, office automation, digitalization of offices, artificial intelligence in workplaces, etc.
- Prepare literature review from a topic of your choice involving business and office management issues: download research papers from Scopus/ABDC indexed Journals. Perform a review of literature. Frame a conceptual model based on the research gaps.
- Apply online tools and platforms, design a questionnaire using various kinds of questions including Likert scale statements to address a particular business problem.
- Apply appropriate tests to analyse the data and report the results.
- Prepare a brief report following proper format in Word processing software.

References

- Bryman, A., Bell, E., & Harley, B. (2022). *Business research methods*. Oxford University Press.
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods*. (12th ed.). New York, United States: McGraw Hill International Edition.
- Denzin Norman K., and Lincoln Yvonna S., (2018). *The Sage Handbook of Qualitative Research*. Sage Publications, Inc. (5th ed.)
- Greene, W. H. (2017). *Econometric Analysis*. Pearson Pvt. Limited
- Malhotra, N. K. (2020). *Marketing research: An applied orientation* (7th ed.). Pearson Education Limited.
- Neuman, W.L., (2014). *Social Research Methods: Qualitative and Quantitative Approaches*, Pearson Education Limited.
- Saunders, M., Lewis, P., & Thornhill, A. (2015). *Research methods for business students* (7th ed.). Pearson Education Limited.
- Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). John Wiley & Sons.

- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods*. (9th ed.). South Western: Cengage Learning.

Bachelor of Arts (VS)- Modern Office Management

Semester VII

Discipline Specific Course – 7.2- (DSE 7.2) People Management in Modern Offices

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
People Management in Modern Offices DSE (7.2)	4	3	1	-	Class XII	Nil

Learning Objective:

- To provide learners with essential knowledge of Human Resource Management.
- To develop skills for effectively managing people in modern office environments.
- To equip students with competencies in recruitment and selection processes.
- To train learners in designing and delivering effective training and development programs.

Learning Outcomes: Students will be able to:

- Explain the functions and strategic importance of human resource management in modern office environments.
- Describe and apply recruitment, selection, and onboarding processes using appropriate tools and ethical practices suited for office management.
- Evaluate training needs, suggest suitable training methods, and assess employee performance using appraisal techniques relevant to modern offices.
- Interpret and apply key HR metrics using HR analytics tools to support data-driven decision-making in office settings.
- Demonstrate awareness of inclusive workplace practices, grievance handling, workplace safety, professional conduct, and legal compliance including POSH in office environments.

Course Content

(Theory 45 Hours + 15 hours Tutorials)

Unit 1: Introduction to Human Resource Management in Modern Offices 10 Hours

Meaning, nature, and scope of HRM in office management, functions and objectives of HRM in modern offices, evolution of HRM: from personnel management to strategic HRM, role of HR in modern office environments and knowledge-based workplaces, HRM in the digital era: trends and challenges for office managers, line and staff roles of HR managers in office settings.

Unit 2: Recruitment, Selection, and Onboarding in Office**10 Hours**

Manpower planning and job analysis for office roles, recruitment process in office management: internal vs. external sources, selection process in offices: screening, interviews, and tests, legal and ethical considerations in recruitment for office-based roles, employee onboarding and socialization in office contexts, use of AI and digital platforms for office recruitment processes.

Unit 3: Employee Development, Workplace Culture, and Office Conduct**11 Hours**

Learning and development in office settings, training methods suitable for modern offices: on-the-job and off-the-job, career planning and succession planning. Methods of performance appraisal, managing diversity, equity, and inclusion (DEI) in office settings, grievance handling and employee relations in offices. Workplace safety, code of conduct and office discipline, POSH Act (Prevention of Sexual Harassment) in office environments.

Unit 4: HR Analytics and Key Metrics for Office Management**14 Hours**

Introduction to HR analytics in office management: concept and significance, types of HR data: operational, strategic, and behavioural in office contexts, common HR metrics: employee turnover rate, cost per hire, time to fill, absenteeism rate, employee satisfaction index, training effectiveness, diversity ratio, case study: using data for HR decisions in modern office setups, ethical use of employee data in office environments.

Practical:

- Prepare a job description and specification for an office role
- Design a basic recruitment poster using MS Word/Canva
- Create a performance appraisal form
- Calculate HR metrics using Excel with dummy data
- Conduct a mock interview or role play
- Case study analysis on HR issues in startups or digital workplaces

Reference

- Rao, V. S. P. (2020). Human resource management: Text and cases (4th ed.). Excel Books.
- Decenzo, D. A., Robbins, S. P., & Verhulst, S. L. (2021). Fundamentals of human resource management (12th ed.). Wiley.
- Dessler, G. (2020). Human resource management (15th ed.). Pearson Education.
- Bhatia, S. K. (2018). HR analytics and digital HR practices. Deep & Deep Publications.
- Aggarwal, N., & Sharma, M. (2022). HR metrics and workforce analytics. Taxmann Publications.

**Bachelor of Arts (VS)- Modern Office Management
Semester VII**

Discipline Specific Course - (DSE 7.3)-Fund Management for Startups

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE
COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Fund Management for Startups DSE (7.3)	4	3	0	1	Class XII	Nil

Learning objective:

- To provide students with an in-depth understanding of the financial system.
- To explain the significance of the financial system in supporting business strategy and operations.
- To analyze the structures and components of the financial system.
- To examine the regulatory frameworks governing the financial system.

Learning outcomes: After completion of the course, students would be able to:

- Describe the components and functions of a financial system
- Critically examine and evaluate the components of a formal financial system and comprehend the interplay between regulatory frameworks and financial institutions
- Analyse the functioning and working of money and capital markets.
- Develop practical skills in financing and investment decision-making, allowing them to contribute effectively to strategic business planning and resource allocation.
- Evaluate various sources of capital, enabling them to contribute strategically to financial decision-making and to leverage diverse funding avenues to support the growth and sustainability of entrepreneurial ventures

Course Content (Theory 45 Hours + 30 hours practical)

Unit-1: Financial Planning and Strategy 10 Hours

Concept and Importance of Financial forecasting, Long-range planning and short-range planning, Strategic Decision making and planning, Strategic financial planning and steps in financial planning, financial systems and Economic Development, Components of the Formal Financial System; Overview of Indian financial system.

Unit-2: Financial Market and its Regulators 12 Hours

Financial Market: Classification- Capital Market (Primary and Secondary); Primary Market: Types of Issues, Factors for increase in popularity of international markets, Instruments; Secondary Market-Functions and Significance of Stock Exchanges; Money Market: Functions, Benefits & Instruments; Concept, Need for Financial Derivatives, Types of Derivative and Traders in Derivatives Market. Regulatory Structure of Financial Institutions and Markets.

SEBI: Powers and Functions & Investor Protection Measures. RBI: Role of RBI in Indian Financial System.

Unit-3: Financial Services and Sources of Corporate Finance

12 Hours

Financial Services – Meaning, Concept and Importance of Financial Services, Types of Financial services: Fund Based and Fee based; Leasing and Hire Purchase finance; Factoring and forfeiting; Bills Discounting; Concept and Importance of Insurance; Types of Insurance; Merchant Banking; Underwriting; Investment Banking.

Equity Share Capital, Preference Share Capital, Debenture-Types Public Deposit; International Sources of Finance: ADR, GDR, ECB, FCCB, FDI and FII.

Unit-4: Funding of Start Ups and MSMEs

11 Hours

Crypto Currency, Angel Funding, Crowd Funding, Boot Strapping, Funding from incubators and accelerators and Alternate Investment Fund; Venture Capital Financing-Meaning and features of Venture Capital, Types of Venture Capitalist, Stages of Venture financing, Factors affecting Venture Capital financing.

Practical:

- Role-play pitching your startup idea and responding to typical investor questions about funding and financials.
- To develop a financial strategy for a new startup, including recommendations for financing, investing, and managing risk.
- Prepare a report on financing options for startups.
- Prepare 5-6 slides showing key financial metrics, funding needs, and expected ROI for investors.
- Assign teams to conceptualize a crowdfunding campaign for a social-impact. (e.g., sustainable crafts, organic farm produce).
- Analyse real startup case studies.

References

- Chandra, P. (2023). Fundamentals of Financial Management (7e ed.). McGraw Hill.
- Khan, M. Y. (2022). Financial Services (10e ed.). McGraw Hill.
- Kulkarni, P. V., & Satyaprasad, B. G. (2015). Financial Management (14e ed.). Himalaya Publishing House.
- Pandian, D. P. (2009). Financial Services and Markets. Vikas Publishing House.
- Pathak, B. V. (2014). Indian Financial System (4e ed.). Pearson.

Bachelor of Arts (VS) Modern Office Management

Semester VII

Discipline Specific Course - (DSE 7.4)-Quality Management in Office Operations

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Quality Management in Office Operations DSE (7.4)	4	3	1	-	Class XII	Nil

Learning Objective:

- To equip students with knowledge, tools, and techniques for quality management in office operations.
- To develop an understanding of the principles and practices of quality management.
- To introduce industry frameworks such as ISO 9001 and Six Sigma.
- To familiarize students with digital tools that enhance efficiency and accuracy in administrative tasks.
- To promote continuous improvement in office processes and operations.
- To emphasize the role of quality in achieving customer satisfaction in administrative environments.

Learning Outcomes:

- Understand Quality Concepts in Office Environments
- Interpret and apply ISO 9001:2015 quality management principles in office processes.
- Implement 5S, Six Sigma, and SOP frameworks to ensure standardization and compliance.
- Apply root cause analysis (RCA) and quality circles to solve recurring office problems.
- Identify and use software (ERP, CRM, BI tools) for tracking quality performance.
- Understand the role of cybersecurity, data accuracy, and automation (AI, RPA) in enhancing service quality.
- Apply Kaizen and Lean principles to foster a continuous improvement mindset.

Course Content

(Theory 45 Hours + 15 hours tutorial)

Unit 1: Introduction to Quality Management in the Office

10 hours

Definition and scope of quality in office functions, Importance of quality in administrative processes and customer service, Key concepts: efficiency, effectiveness, accuracy, standardization, Evolution of quality management (Deming, Juran, TQM principles), Quality vs. productivity: finding the balance. ISO 9001:2015 – Quality Management Systems (QMS)

overview, 5S methodology and its application in office environments, Six Sigma basics and relevance in administrative processes, Office Standard Operating Procedures (SOPs) and compliance, Benchmarking and quality audit essentials

Unit 2: Tools & Techniques for Quality Improvement

10 hours

Flowcharts and process mapping for office workflows, Cause-and-effect diagrams (Ishikawa/Fishbone), Check sheets, Pareto analysis, control charts, Root cause analysis (RCA), Quality Circle concept in office teams

Unit 3: Digital Tools for Quality Monitoring in Office Operations

11 hours

Office automation and digital document management systems, Use of ERP and CRM systems in quality tracking, AI and RPA in enhancing office service quality, Data dashboards and reporting for quality control, Role of cybersecurity and data accuracy in quality assurance

Unit 4: Continuous Improvement and Quality Culture in Offices

13 hours

Concepts of Kaizen and Lean management in office work, Training and capacity building for quality excellence, Leadership's role in building a quality-focused culture, Customer feedback and service quality evaluation, Measuring office performance with KPIs (Key Performance Indicators)

Reference

- Summers, D. C. S. (2010). Quality management: Creating and sustaining organizational effectiveness (3rd ed.). Pearson.
- Comprehensive coverage of quality management concepts, tools, and continuous improvement.
- Parnell, L. L. (1992). TQM in the office: A guide to office productivity. Quality Resources.
- Cochran, C. (2015). ISO 9001:2015 in plain English. Paton Professional.
- Juran, J. M., & Godfrey, A. B. (1999). Juran's quality handbook (5th ed.). McGraw-Hill.
- Authoritative reference on quality control, planning, and improvement—foundational for all quality professionals.
- George, M. L. (2003). Lean Six Sigma for service: How to use Lean Speed and Six Sigma Quality to improve services and transactions. McGraw-Hill.

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Semester VII

Discipline Specific Course - (DSE 8.1)-BUSINESS ANALYTICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
BUSINESS ANALYTICS (DSE 8.1)	4	2	0	2	Class XII	Nil

Learning Objectives

- To introduce learners to the concepts of business intelligence and analytics.
- To develop the ability to describe and interpret business data effectively.
- To train students in using various statistical tools for data analysis.
- To enable the creation of predictive models based on data insights.
- To guide learners in making inferences to solve business problems.
- To support effective business decision-making through data-driven insights.

Learning outcomes: After completion of the course, the learners will be able to:

- Apply skills to compute, aggregate, and summarise data.
- Analyse and interpret data using R packages and basic statistical techniques.
- Develop and compare linear regression models using spreadsheets and R, and interpret the outcomes.
- Explore and examine textual data using R, including techniques such as text mining and sentiment analysis.

Course Content

(Theory 30 Hours + 60 hours practical)

Unit 1: Introduction to Business Analytics and Data Preparation

5 hours

Introduction to Data Science; Data analytics Vs. data analysis, Application of analytics in business, Types of Data: Nominal, Ordinal, Scale; Big Data and its characteristics, Applications of Big data, Key challenges in data analytics. Data Preparation using Spreadsheets: Data Preparation and Cleaning, Sort and filter, Conditional formatting, Text to Column, Removing Duplicates, Data Validation, identifying missing values and outliers in the data.

Unit 2: Getting started with R

5 hours

Introduction to R, Advantages of R, Installation of R Packages, Importing data from

spreadsheet files, Commands and Syntax, Packages and Libraries, Data Structures in R - Vectors, Matrices, Arrays, Lists, Factors, Data Frames, Conditionals and Control Flows, Loops, Functions, and Apply family.

Unit 3: Descriptive Statistics Using R

10 hours

Importing Data file; Data visualisation using charts: histograms, bar charts, box plots, line graphs, scatter plots. etc; Data description: Measure of Central Tendency, Measure of Dispersion, Relationship between variables: Covariance, Correlation and coefficient of determination.

Unit 4: Predictive and Textual Analytics

(10 hours)

Simple Linear Regression models; Confidence & Prediction intervals; Multiple Linear Regression; Interpretation of Regression Coefficients; heteroscedasticity; multi-collinearity.

Basics of textual data analysis, significance, application, and challenges. Introduction to Textual Analysis using R. Methods and Techniques of textual analysis: Text Mining, Categorization and Sentiment Analysis.

Note: The General-Purpose Software referred in this course will be notified by the Department every three years.

Practical: The learners are required to:

- Apply data cleansing techniques such as removing duplicates and handling missing values.
- Build and interpret simple linear regression models using spreadsheets or R.
- Import, process, and analyze datasets in R using relevant functions and packages.
- Use R to visualize data and present analytical results clearly.

References

- Alexander, M., Decker, J., & Wehbe, B. (2014). Microsoft business intelligence tools for spreadsheet analysis. New Jersey, United States: Wiley.
- Giri, A., & Paul, P. (2021). Applied marketing analytics: using spss (modeler, statistics and amos graphics). Delhi, India: PHI Learning Pvt. Ltd.
- Kumar, D. U. (2017). Business analytics: the science of data driven decision making. New Jersey, United States: Wiley.
- McKee, A. (2003). Textual analysis: a beginner's guide.(1 st ed.). London, United Kingdom: Sage Publication.
- Motwani, B. (2019). Data analytics with r. New Jersey, United States: Wiley.
- North, M. (2012). Data mining for the masses. Athens, Georgia: Global Text Project.
- Ohri, A (2012). R for business analytics. Springer.
- Provost, F., & Fawcett, T. (2013). Data science for business. New York, United States: O'Reilly Media.
- Rao, P. H. (2013). Business analytics—an application focus. Delhi, India: PHI Learning Private Limited

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Semester VIII

Discipline Specific Course - (DSE 8.2)-E-Business Management

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
E-Business Management DSE (8.2)	4	3	-	1	Class XII	Nil

Learning Objective:

- To introduce students to the fundamentals of e-commerce in the context of modern office management.
- To help learners understand various digital business models.
- To explain online transaction processes and their applications.
- To familiarize students with emerging technologies in e-commerce.
- To equip students with the skills to use e-commerce tools for enhancing office efficiency.
- To prepare learners to support organizational growth in a digital business environment.

Learning Outcomes

- Understand the nature, scope, and various types of e-business models, including platform, aggregator, subscription, D2C, and other emerging models.
- Analyze real-world business cases to evaluate e-business strategies, marketplace structures, and digital transformation choices.
- Explain key e-commerce security threats, technology-based security solutions, and the relevance of the Information Technology Act, 2000.
- Apply foundational knowledge to plan, register, and design an e-business website and understand the online business launch process.
- Evaluate digital marketing strategies, key business performance metrics such as CAC, LTV, and ROI, and approaches to scaling e-businesses.
- Demonstrate familiarity with various e-payment systems, including UPI, wallets, cards, BNPL, and payment gateways used in digital commerce.

Course Content

(Theory 45 Hours + 30 hours practical)

Unit 1: Introduction to E-business Models

10 hours

Nature and scope of e-commerce and e-business, concept of e-Marketplaces. Types of e-business models: B2B, B2C, Business to Government (B2G), Direct-to-Consumer (D2C), Subscription & Premium models, Gig economy platforms, Circular economy models,

Marketplace model vs. Aggregator model, Key elements of e-business model, emerging technologies for e-business solutions.

Unit 2: Security and encryption

10 hours

Need, concepts and scope of e-security, security threats in the e-business (security intrusions and breaches), technology solutions (encryption: symmetric and asymmetric, cybersecurity best practices, Information Technology Act, 2000 (meaning, objectives and key provisions), Contemporary issues relating to security.

Unit-3: Launching Online Business and Website Designing

15 hours

Requirements for starting an online business, registration of business, funding options available for startup e-businesses. Designing, building and launching e-commerce website (decisions regarding selection of hardware, software, outsourcing vs. in-house development of a website), search engine optimization.

Introduction to HTML, tags and attributes: Text formatting, Fonts, Hypertext Links, Tables, Images, Lists, Forms, Frames, Cascading Style Sheets.

Unit 4: Scaling Strategies and Payment Systems in E-Business

10 hours

Digital Marketing (concept and types: SEM, SMM, email marketing, etc.). Key metrics: Customer Acquisition Cost (CAC), Life Time Value (LTV), Conversion rate, ROI, google analytics, etc. CRM. E-Payment, Methods of E-payments (Cards, UPI, Buy Now Pay Later (BNPL), Smart Cards and e-money. Digital signatures (procedure, working and legal position), payment gateways, online banking: electronic fund transfer, NEFT/RTGS/IMPS, automated clearing house, automated ledger posting.

Practical: The learners are required to:

- Compare two e-businesses (e.g., Amazon vs. Zomato) and identify their models.
- Develop and pitch a new e-business idea, specifying its type and revenue model.
- Analyze a real-life cyberattack on a digital platform and suggest preventive measures.
- Draft a step-by-step plan for registering and setting up an online business in India.
- Create a homepage with product listing, contact form, and basic styling.
- Analyze a website using free SEO tools and suggest improvements. Use given data to calculate key business performance metrics (CLV, Conversion Rate, etc)

References

- Blank, S., & Dorf, B. (2012). *The startup owner's manual: The step-by-step guide for building a great company*. K&S Ranch.
- Chaffey, D. (2011). *E-Business & E-Commerce Management: Strategy, implementation and practice* (5th ed.). Pearson.
- Combe, C. (2003). *Introduction to e-business: Management and strategy*. Butterworth-Heinemann.
- Joseph, P. T. (2023). *E-Commerce: An Indian perspective* (7th ed.). PHI Learning.
- Mohapatra, S. (2016). *E-commerce strategy: Text and cases*. PHI Learning.
- Turban, E., King, D., Lee, J. K., Liang, T.-P., & Turban, D. C. (2018). *Electronic commerce: A managerial perspective* (9th ed.). Pearson

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Semester VIII

Discipline Specific Course - (DSE 8.3)- E-Filing of GST and TDS Returns

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
E-Filing of GST and TDS Returns DSE 8.3	4	2	-	2	Class XII	Nil

Learning Objective

- To equip students with the practical skills required for filing of returns under GST and TDS laws.

Learning Outcomes

- After completing the course, the student shall be able to:
- Explain the basic framework and structure of GST, including the meaning of input tax credit and the process of its utilization.
- Understand the concept of advance payment of tax and tax deduction at source.
- Analyze various types of GST and TDS returns
- Develop the ability of e-filing of TDS and GST returns

Course Content (Theory 30 Hours + 60 hours practical)

Unit-1: Conceptual Framework 10 hours

Taxation in India: objectives, need, and significance; Direct Tax vs. Indirect Tax – meaning and key differences; overview of major taxes in India (Income Tax, GST, etc.); basic concepts: assessee, previous year, assessment year. Meaning of e-filing; difference between e-filing and regular filing of returns; benefits and limitations of e-filing; Documents required for e-Filing; procedure of e-filing.

Unit 2: TDS and e-Filing of TDS returns 10 hours

Introduction to the concept of TDS; TAN, provisions in brief relating to advance payment of tax; schedule for deposit of TDS; schedule for submission of TDS returns; prescribed forms for filing of TDS returns; exemption from TDS – Form 13, 15G, 15H

Units 3: Conceptual framework of GST 10 hours

Constitutional framework of GST (Taxation Powers of Union & State Government); Rationale for GST; Structure of GST (SGST, CGST, UTGST & IGST); GST Council, GST Network,

Registration, Output tax liability of CGST, SGST, UTGST, IGST, State compensation cess, Input tax credit utilization. Small supplies and composition scheme.

Unit IV: Filing of GST returns

15 hours

Payment of GST by electronic ledger: electronic liability register, electronic credit ledger, electronic cash ledger. GST returns: GSTR-1, GSTR-2, GSTR-3, GSTR-4, GSTR-9, GSTR-3B, Interest/penalty for late/non-filing of return.

Practical:

- Practical workshop on e-filing of TDS/GST returns
- Practice filling up of various TDS forms
- Fill out a GST registration form using fictional data.
- Practically fill hypothetical data in various GST forms using offline utility or online demo tools.

References:

- Ahuja, G., & Gupta, R. (2022). Systematic approach to indirect taxation: GST and customs (8th ed.). Bharat Law House.
- Babbar, S., Kaur, R., & Khurana, K. (2021). Goods and services tax (GST) and customs law (Revised ed.). Scholar Tech Press.
- Bansal, K. M. (2024). GST & customs law (12th ed.). Taxmann Publications.
- Jaishwal, M. (2023). Practice, procedure & e-filing of TDS & TCS. Bharat Law House.
- Singhanian, V. K. (2024). Deduction of tax at source (TDS/TCS) with advance tax and refunds (37th ed.). Taxmann Publications.
- Singhanian, V. K. (2024). Students' guide to GST & customs law (12th ed.). Taxmann Publications.
- Sisodia, P. (2019). Handbook on goods & services tax (GST) (3rd ed.). Bharat Law House

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Semester VIII

Discipline Specific Course - (DSE 8.4)-Office Legal Documentation and Pleading

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Office Legal Documentation and Pleading DSE 8.4	4	3	1	0	Class XII	Nil

Learning Objective:

- To equip students with foundational knowledge of legal documentation and pleadings.
- To develop practical skills in drafting, filing, and managing legal documents in civil and criminal matters.
- To explain the structure, format, and statutory requirements of legal documents in India.
- To emphasize ethical practices in legal drafting and documentation.
- To introduce the role of digitization and compliance in modern legal processes.
- To provide exposure to real-world formats, court rules, and documentation protocols.
- To build students' confidence in preparing and handling legally enforceable instruments and pleadings.

Learning Outcomes:

- Understand Legal Documentation in the Indian Context
- Identify the legal requirements for execution, attestation, notarization, registration, and stamping of documents.
- Draft standard legal agreements such as employment contracts, NDAs, and service/vendor contracts.
- Identify and draft essential clauses like indemnity, termination, jurisdiction, and arbitration.
- Apply procedural rules related to verification, cause of action, and relief.
- Demonstrate Ethical Practices and Maintain Legal Records
- Understand the implications of non-compliance with court filing procedures and improper documentation under Indian law.

Course Content

(Theory 45 Hours + 15 hours Tutorials)

Unit 1: Introduction to Legal Documentation in India

15 hours

Meaning, nature, and classification of legal documents, Legal capacity to contract and execute documents, Authentication, attestation, notarization, and registration (Indian Registration Act,

1908), Stamp duty and e-stamping (Indian Stamp Act, 1899), E-filing and digitization of documents (Information Technology Act, 2000). Drafting commercial and office-related agreements:, Employment agreements: Non-disclosure agreements (NDAs), Vendor and service contracts, Sale deed, lease deed, gift deed: structure and key clauses, Power of attorney (general and special)

Unit 2: Court Pleadings & Civil Litigation Documents

10 hours

Format and structure of civil pleadings under the Code of Civil Procedure, 1908, Complaint, written statement, affidavit, rejoinder, Application under Order 39 (injunctions), Order 6 Rule 17 (amendment), Essentials of verification, cause of action, and relief claimed, Filing procedures and timelines in civil courts

Unit 3: Criminal Pleadings & Related Documentation

10 hours

Basics of complaint drafting under Criminal Procedure Code, 1973, FIR vs. private complaint, Drafting bail applications, anticipatory bail, and discharge applications, Legal notices and police complaints, Vakalatnama and appearance memos

Unit 5: Professional Ethics, Record-Keeping & Legal Compliance

10 hours

Duties of legal professionals and documentation staff, Legal record-keeping, file maintenance, indexing, and docketing, Confidentiality and data protection under Indian law (IT Act, RTI Act, proposed DPDP Bill, Compliance with court filing norms and registry procedures, Consequences of improper documentation or false pleadings.

Practical:

- Understanding a format of notarized affidavit and registered deed
- Prepare a sample employment agreement and a general power of attorney
- Draft a complaint and a written statement based on a fictional dispute
- Draft a police complaint and a basic bail application. Create a model legal documentation file with index and summary sheet

Reference

- Mogha, G. C. (2021). *Mogha's pleadings and conveyancing* (19th ed.). Eastern Book Company.
- Murli, M. C. (2022). *Legal drafting, pleading and conveyancing*. LexisNexis.
- Tiwari, O. P. (2020). *The art of drafting: Pleadings, notices, agreements, deeds & conveyancing*. Allahabad Law Agency.
- Ministry of Law and Justice. (2000). *The Information Technology Act, 2000*. Government of India.

BACHELOR OF ARTS (VS) **INSURANCE MANAGEMENT**

Bachelor of Arts (VS)- Insurance Management

Semester VII

Discipline Specific Elective Course -7.1 (Dse-7.1)- Enterprise Risk Management

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
ENTERPRISE RISK MANAGEMENT (DSE- 7.1)	4	3	-	1	12th	-

Learning Objectives:

- To provide comprehensive knowledge of risk management models.
- To understand internal and external factors affecting risk in financial institutions.
- To explain tools and techniques used for risk identification.
- To develop insights into quantitative and qualitative risk measures.
- To introduce statistical concepts relevant to risk modeling.
- To equip students with knowledge and skills required for enterprise risk management.

Learning Outcome: Students will be able to:

- Explain the principles and scope of ERM in the context of financial institutions.
- Compare different risk management frameworks.
- Identify and classify a wide range of risks including emerging risks like cyber and climate risk.
- Utilize appropriate risk identification tools and techniques.
- Apply and interpret various risk measures (VaR, TVaR, etc.).
- Analyse data using statistical methods including correlation, regression, and copulas.

Course Content

(Theory 45 Hours + 30 hours Practical)

Unit 1: An introduction to enterprise risk management

10 Hours

Definitions and concepts of risk, significance of managing risk. Enterprise risk management frameworks. Corporate governance. Models of risk management. The risk management time horizon. Types of financial institution, banks, insurance companies, pension schemes.

Foundations and endowments. The internal environment of an enterprise: internal stakeholders, culture, structure, capabilities. The external environment of an enterprise: external stakeholders, political environment, economic environment, social and cultural environment, competitive environment, regulatory environment, professional environment, industry environment.

Unit 2: Risk categories and identification

10 Hours

Identify the risks faced by an entity, including market and economic risk, interest rate risk, foreign exchange risk, credit risk, liquidity risk, systemic risk, demographic risk, non-life insurance risk, operational risks, residual risks, environmental risk, legal risk, regulatory risk, political risk, agency risk, reputational risk, project risk, strategic risk, including climate risk and cyber risk, demographic risk and moral hazard. Risk identification: risk identification tools, risk identification techniques, assessment of risk nature, risk register.

Unit 3: Risk measurement and assessment

10 Hours

The different methods of assessing risk, Understand common risk measures. The properties and limitations of the following risk measures: Value at Risk (VaR), Tail Value at Risk (TVaR), Probability of ruin, Expected shortfall. Determine risk exposures and tolerances using these measures. Choosing of suitable time horizon and risk discount rate.

Unit 4: Modelling techniques

15 Hours

Spread, Skew, Kurtosis, Correlation, Regression. Statistical distributions: Univariate discrete distributions: Univariate continuous distributions, Multivariate distributions, Copulas, fitting data to a distribution, fitting data to a model, smoothing data, using models to classify data, Uncertainty, Credibility, Model validation. Modelling time series, Deterministic modelling, Stochastic modelling, Time series processes.

Reference

- Crouhy, M., Galai, D., & Mark, R. (2014). *The essentials of risk management* (2nd ed.). McGraw-Hill Education.
- Lam, J. (2014). *Enterprise risk management: From incentives to controls* (2nd ed.). Wiley.
- McNeil, A. J., Frey, R., & Embrechts, P. (2015). *Quantitative risk management: Concepts, techniques and tools* (Revised ed.). Princeton University Press.

Practical: The learners are required to:

- Submit a report on enterprise risk management practice of an enterprise of your choice.
- Describe and analyse the internal and external environment of an enterprise of your choice.
- Identify and measure the risks faced by an enterprise of your choice and prepare a report on that. Propose changes for the better management of risks of such enterprise.
- Design a risk management model for the enterprise of your choice.
- The learners are required to do practical exercise from unit 3 & 4

Bachelor of Arts (VS)- Insurance Management

Semester VII

Discipline Specific Elective Course -7.2 (Dse-7.2)- Behavioral Insurance

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
BEHAVIORAL INSURANCE (DSE- 7.2)	4	3	-	1	12th	-

Learning Objectives:

- To equip students with knowledge and skills related to behavioral insurance.
- To differentiate behavioral insurance from traditional insurance models.
- To introduce key concepts of behavioral economics and their relevance to insurance.
- To explain behavioral economic frameworks, such as behavioral lifecycle theory.
- To understand consumer decision-making under uncertainty and risk.
- To provide comprehensive insights into consumer behavior in the context of insurance.
- To explore applications of behavioral finance in insurance.
- To familiarize students with emerging technologies, data usage, ethical considerations, and future trends in behavioral insurance.

Learning outcomes: After completion of this course:

- Understand the foundations of behavioral insurance and how it differs from traditional insurance models.
- Analyse how behavioral economics and consumer psychology influence insurance behavior.
- Explore decision-making biases, heuristics, and emotional responses that affect insurance buying and claims behavior.
- Apply concepts from behavioral finance to insurance-related choices.
- Evaluate the ethical, regulatory, and technological aspects of behavior-based insurance.

Course Content

(Theory 45 Hours + 30 hours Practical)

Unit I: Foundations of Behavioral Insurance

10 Hours

Introduction to behavioral insurance: evolution and emergence of behavior-based models, traditional vs. Behavior-based underwriting and pricing, foundations from behavioral economics: heuristics and biases: representativeness, availability, anchoring, loss aversion and

framing effects in risk decisions, bounded rationality in insurance choices, prospect theory and its relevance to insurance products, role of psychology in insurance contexts: cognitive psychology and behavioral tendencies, emotion and affect in risk perception, perceived control and optimism bias in insurance planning, frameworks and models: dual-process theory: system 1 vs. System 2 thinking, behavioral lifecycle theory, decision-making under uncertainty vs. Risk

Unit II: Consumer Behavior in Insurance

10 Hours

Insurance decision-making: role of perceived risk and subjective probability, trust and credibility in insurance brands, complexity aversion and information overload, behavioral influences on purchase behavior: framing and presentation of policy options, default options, inertia, and status quo bias, peer effects and social norms in policy adoption, post-purchase behavior & claims psychology: moral hazard and behavioral loyalty, regret aversion and satisfaction post-claim, complaint behavior and perceived fairness, communication & agent behavior: behavioral nudges in agent-customer interaction, visual framing, simplification, and behavioral scripting, role of storytelling and narratives in influencing risk perception.

Unit III: Behavioral Finance Applications in Insurance

10 Hours

Introduction to behavioral finance concepts: time inconsistency and intertemporal choice, present bias and its implications for long-term insurance, hyperbolic discounting and savings-linked insurance, biases impacting financial and insurance behavior, overconfidence, self-attribution bias, and insurance over-/under-purchasing, mental accounting: earmarking insurance for certain risks, ambiguity aversion vs. Risk aversion, prospect theory in premium and payout design: reference points in perceived value of premiums, diminishing sensitivity to large vs. Small claims, utility curvature and behavioral demand elasticity, behavioral approaches to insurance product structuring: designing around biases: deductible framing, bundling, and coverage options, perceived fairness of pricing: community vs. personalized premiums, Case examples from microinsurance and inclusive insurance models.

Unit IV: Technology, Data, Ethics, and the Future

15 Hours

Behavioral data & digital insurance models, data sources: telematics, wearables, mobile apps, and smart home devices, gamification, nudges, and reward structures, dynamic pricing based on behavior, case studies of behavior-based insurance: vitality (discovery, John Hancock), root insurance, lemonade, metro-mile, success metrics and user engagement strategies, failures and limitations of behavioral models, ethical, legal, and regulatory considerations; data privacy, consent, and GDPR implications, algorithmic fairness and transparency, surveillance vs. Empowerment debate, future trends, predictive behavioral models using AI and machine learning, integration of behavioral insurance in public policy and welfare schemes, social scoring and ethical dilemmas.

Practical: The learners are required to:

- Design a structured questionnaire aimed at identifying the presence and impact of cognitive biases within the insurance industry.
- Simulate insurance decision-making under uncertainty applying prospect theory principles.
- Evaluate the impact of digital technology and insurtech innovations on the delivery, efficiency, and quality of insurance services.
- The learners are required to do practical from unit 1, 2, & 3.

References

- Thaler, R. H. (2015). *Misbehaving: The making of behavioral economics*. W. W. Norton & Company.
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Ackert, L. F., & Deaves, R. (2010). *Behavioral finance: Psychology, decision-making, and markets* (2nd ed.). South-Western Cengage Learning.
- Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness* (Rev. ed.). Penguin Books.

Bachelor of Arts (VS)- Insurance Management

Semester VII

Discipline Specific Elective Course -7.3 (Dse-7.3)- Insurance Analytics

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
INSURANCE ANALYTICS (DSE- 7.3)	4	3	-	1	12th	-

Learning Objectives

- Understand key insurance concepts and data flows.
- Apply statistical and machine learning models to insurance data.
- Analyse claims, premiums, customer behaviours, and risk using analytics.
- Utilize dashboards and visualization tools for insurance data reporting.
- Learn to detect fraud and optimize processes in insurance with analytics.

Learning Outcomes: By the end of this course, students will be able to:

- Understand insurance domain data and apply analytical thinking to industry problems.
- Use statistical and ML models to solve real-world insurance problems like pricing and fraud detection.
- Build dashboards and analytical reports using visualization tools.
- Apply predictive and prescriptive models for customer retention, risk profiling, and operational efficiency.
- Evaluate ethical implications of analytics in insurance decision-making.

Course Content

(Theory 45 Hours + 30 hours Practical)

Unit 1: Introduction to Insurance and Analytics

10 Hours

Overview of the insurance industry: life, general, and health insurance, Insurance data: policy, claims, customer, risk, and underwriting data, Introduction to business analytics: descriptive, diagnostic, predictive, prescriptive.

Unit 2: Descriptive Analytics in Insurance

10 Hours

Data summarization and visualization, Trend analysis in claims and policy renewals, KPI reporting: loss ratio, claim frequency/severity, retention rate, Dashboard design for policy and claim metrics.

Unit 3: Predictive Analytics for Risk and Claims

10 Hours

Predictive modelling in underwriting and pricing, Logistic regression for claim prediction, Decision trees and random forests for customer churn, Time series forecasting for claim volumes.

Unit 4: Customer and Fraud Analytics

15 Hours

Customer segmentation and profiling using clustering (e.g., K-means), Lifetime value (LTV) modelling in insurance, Fraud analytics: anomaly detection and classification Use of NLP in detecting fraudulent claims (e.g., text analysis).

Prescriptive Analytics and Optimization: Optimizing pricing and product recommendations, Claims process improvement using process analytics, Use of simulation techniques in insurance (e.g., Monte Carlo methods), Decision optimization under uncertainty.

References:

- Wüthrich, M. V., & Merz, M. (2022). *Statistical foundations of insurance analytics: Machine learning, data science and inference*. Springer. <https://doi.org/10.1007/978-3-030-91336-3>
- Feldblum, S. (2020). *Principles of insurance analytics*. ACTEX Learning.
- Antonio, K., & Verbelen, R. (2021). *Data science for actuaries: Theory and practice*. Springer.
- Bhattacharya, S. (2021). *AI and analytics in the insurance industry: Trends, tools, and applications*. Springer. <https://doi.org/10.1007/978-3-030-69635-8>
- Miller, T. W. (2015). *Modeling techniques in predictive analytics: Business problems and solutions with R*. Pearson Education.
- Verbelen, R., Antonio, K., & Claeskens, G. (2018). Unravelling the predictive power of telematics data in car insurance pricing. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 67(5), 1275–1304. <https://doi.org/10.1111/rssc.12291>
- Shi, P., & Yang, S. S. (2020). Machine learning in insurance: Applications and challenges. *North American Actuarial Journal*, 24(2), 151–168. <https://doi.org/10.1080/10920277.2019.1694821>
- Wüthrich, M. V. (2020). Bias correction in insurance pricing with generalized linear models. *European Actuarial Journal*, 10(2), 481–499. <https://doi.org/10.1007/s13385-020-00234-0>

Practical: The learners are required to:

- Analysing policy performance data of a company of your choice.

- Predicting motor insurance claims for a company of your choice.
- Develop a machine learning-based system for detecting health insurance fraud.
- Design and implement a framework for optimizing policy pricing in life insurance using advanced analytical and computational techniques.
- Design and implement a comprehensive system for data summarization, visualization, and trend analysis in insurance claims and policy renewals, including KPI reporting (e.g., loss ratio, claim frequency and severity, retention rate) and dashboard development for real-time monitoring of policy and claims metrics.
- The learners are required to do practical exercise from unit 1, 2, 3 & 4.

Suggested Tool (Any one) : M.S. Excel, R, Python, Power BI, Tableau

Data Sources

- <https://irdai.gov.in/report-and-statistics1>
- Annual reports of insurance companies in India

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Semester VIII

Discipline Specific Elective Course -8.1 (Dse-8.1)- Fundamentals of Insurance-Linked Securities

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
FUNDAMENTALS OF INSURANCE-LINKED SECURITIES (DSE- 8.1)	4	3	-	1	12th	-

Learning Objectives:

- To provide students with knowledge of securitization and insurance-linked securities (ILS).
- To explain the benefits, costs, and issuing structures of ILS.
- To understand the role of capital markets in supporting the insurance sector through securitization.
- To introduce key aspects of capital market instruments relevant to insurers.
- To acquaint students with the range of capital market instruments available to insurers.
- To explore Alternative Risk Transfer (ART) mechanisms.
- To provide insights into Non-Life Securitization and Life Securitization.

Learning Outcomes: After completing this course, the learners would be able to:

- Describe the concept and application of securitization and ILS in insurance.
- Identify the sources of basis risk and strategies to minimize it.
- Recognize capital market instruments relevant to insurance investment and risk transfer.
- Explain the role and benefits of ART and insurance derivatives.
- Demonstrate understanding of catastrophe risk modelling, especially in the Indian context.
- Compare and contrast reinsurance with securitisation strategies for non-life risks.
- Assess investor motivations and the modelling frameworks used in non-life ILS.
- Describe life insurer structures and risks relevant to securitisation.
- Identify the roles of key stakeholders in life ILS transactions.

Course Content

(Theory 45 Hours + 30 hours Practical)

Unit 1: Overview of securitization

10 Hours

An overview of securitization. Insurance-linked securities: overview, costs and benefits, structural features, issuing vehicles. Structure and functions of capital markets insurance sector as a participant and beneficiary of capital markets. Basis risk: definition of basis risk. Quantifying basis risk. Measures for pro rata hedges. Measures for digital hedges. Measuring positive basis risk. Minimising basis risk. Over-hedging. Sources of basis risk. ILS portfolio monitoring systems.

Unit 2: Capital market instruments relevant to insurers

10 Hours

Capital market instruments relevant to insurers (bonds, equity, hybrid instruments), role of capital markets in insurance risk transfer. Emergence of alternative risk transfer (ART) mechanisms. Role of capital markets in ART. Insurance derivatives. Derivatives and Alternative Risk Transfer. General characteristics of derivatives. Exchange-traded insurance derivatives. Exchange-traded catastrophe derivatives. Exchange-traded temperature derivatives. Catastrophe Risk modelling: An Indian context.

Unit 3: Non-Life Securitisation

10 Hours

Market overview, background and evolution. Market dynamics. Cedants' perspectives on non-life securitization: insurance-linked securities as part of advanced risk intermediation. Objectives of insurance companies. Reinsurance vs securitisation. Keeping risk vs transferring it. Limits and success factors to securitisation. Securitisation as a diversification from traditional retrocession. Indemnity triggers. Scope of coverage. Payout timing. Loss verification. Transparency. Non-indemnity triggers. Parametric triggers (pure and index). Industry loss triggers. Modelled loss triggers. Choosing the optimal trigger. Basis risk from the cedant's perspective. Risk modelling. The investor perspective (non-life).

Unit 4: Life Securitisation

15 Hours

General features of life insurance-linked securitisation. Life insurer corporate and business structures, risks and products. Mutual life offices. Proprietary life offices. Other forms of life office. Principal risks associated with life insurance business. Principal product types and associated risks. Actors and their roles. Sponsor. Investors. Regulators. External professional advisers. Ratings agencies. Monoline insurers. Liquidity providers. Swap providers. Cedants' perspectives on life securitisation. Rating methodology. Life securitisation: risk modelling life insurance securitisation: legal issues. The investor perspective (life). Longevity securitisation: specific challenges and transactions. Longevity risk transfer: indices and capital market solutions.

Practical: The learners are required to:

- Critically assess the regulatory framework governing financial derivatives, ETF, mutual funds, non-life securitisation and life securitisation in India.
- Design a diversified portfolio encompassing mutual funds, exchange-traded funds (ETFs), Insurance-Linked Securities (life and non-life insurance) and related instruments, and conduct a comparative evaluation of their performance and characteristics.

- Evaluate the prevailing pension fund schemes in India.
- The learners are required to do practical exercise from unit 1, 2, 3 & 4.

References

- Barrieu, P., & Albertini, L. (2009). *The handbook of insurance-linked securities*. Wiley.
- Cummins, J. D., & Weiss, M. A. (2009). Convergence of insurance and financial markets: Hybrid and securitized risk-transfer solutions. *Journal of Risk and Insurance*, 76(3), 493–545. <https://doi.org/10.1111/j.1539-6975.2009.01307.x>
- Lane, M. N. (Ed.). (2012). *Alternative risk transfer: Integrated risk management through insurance, reinsurance, and the capital markets*. Risk Books.
- Cowley, A., & Cummins, J. D. (2005). Securitization of life insurance assets and liabilities. *Journal of Risk and Insurance*, 72(2), 193–226. <https://doi.org/10.1111/j.1539-6975.2005.00052.x>
- Swiss Re. (2003). *The role of capital markets in the insurance industry*. Sigma, 5.
- IAA Risk Book. (2020). *Chapter 7: Insurance-Linked Securities*. International Actuarial Association. <https://riskbook.actuaries.org/>
- Bodoff, N. M. (2009). Measuring basis risk in catastrophe bonds. *Variance: Advancing the Science of Risk*, 3(1), 73–90.

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Semester VIII

Discipline Specific Elective Course -8.2 (Dse-8.2)- Strategic Sales Management

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
STRATEGIC SALES MANAGEMENT (DSE- 8.2)	4	3	-	1	12th	-

Learning Objectives:

- To acquaint students with the importance of sales in the insurance industry.
- To understand the characteristics and challenges of selling intangible insurance products.
- To identify key drivers of successful insurance sales strategies.
- To develop strategic planning and execution skills for insurance sales.
- To provide knowledge of customer relationship management (CRM) in insurance.
- To introduce sales technologies used in the insurance sector.
- To understand performance management in insurance sales.
- To explore contemporary issues and trends in insurance sales.

Learning Outcomes: After completion of the course, learners will be able to:

- Explain how the sales function contributes to achieving insurance business goals.
- Evaluate customer needs and risk profiles to develop compelling insurance value propositions.
- Demonstrate goal-setting and performance management strategies in a strategic sales context.
- Formulate SMART strategic sales objectives aligned with business goals.
- Develop integrated sales strategies across multiple insurance sales channels.
- Understand sales forecasting, budgeting, and ROI evaluation in the insurance context.
- Explore strategies for acquiring and retaining insurance customers.
- Understand methods to build and maintain long-term customer relationships.
- Develop and implement KPI-based performance management frameworks.

Course Content

(Theory 45 Hours + 30 hours Practical)

Unit I. Foundations of strategic sales in insurance

10 Hours

Understanding the strategic sales function in insurance: evolution of sales, the strategic role of sales in achieving organizational goals, aligning sales with overall business strategy in the

insurance sector. The unique landscape of insurance sales: intangibility of insurance products, the role of trust and relationships, regulatory environment and compliance, ethical considerations in insurance sales. Key drivers of sales success in insurance: understanding customer needs and risk profiles, value proposition development for insurance products. Developing a strategic sales mindset: goal setting, performance management, continuous learning and adaptation, fostering a customer centric sales culture within insurance organizations.

Unit 2. Strategic sales planning and execution in insurance

10 Hours

Market analysis and segmentation in insurance: identifying target customer segments (individual, corporate, specific industry niches), understanding their insurance needs and buying behaviours, market trends and competitive analysis in the insurance industry. Developing strategic sales objectives and goals: setting SMART (specific, measurable, achievable, relevant, time-bound) objectives for sales volume, market share, customer acquisition, and retention in insurance. Formulating sales strategies: choosing appropriate sales approaches (direct sales, agency networks, online channels), developing channel strategies, and integrating different sales channels effectively, sales forecasting and budgeting in insurance: techniques for forecasting insurance sales, allocating resources effectively, managing sales expenses, and measuring return on sales investments.

Unit 3. Customer relationship management and sales technology in insurance 10 Hours

Strategic customer acquisition and retention in insurance: identifying and targeting potential customers, lead generation strategies specific to insurance, trust and rapport building, strategies for retaining policyholders and maximizing customer lifetime value. Building long-term customer relationships in insurance: strategies for proactive communication, providing ongoing value, handling customer queries and complaints effectively, and fostering customer loyalty. Measuring and analysing customer relationship metrics in insurance: tracking customer satisfaction, retention rates, net promoter score (NPS), and other key metrics to improve relationship management efforts. Leveraging sales technology and digital tools in insurance: exploring the role of online platforms, mobile applications, data analytics, AI-powered tools, and social media in enhancing insurance sales effectiveness.

Unit IV: Performance management and contemporary issues in insurance sales 15 Hours

Designing effective sales performance management systems in insurance: setting key performance indicators (KPIs) for individual sales representatives and teams (e.g., premium generated, number of policies sold, cross-selling ratios, customer satisfaction scores). Sales force motivation and compensation in insurance: developing effective compensation plans (salary, commission, bonuses), designing incentive programs, and fostering a motivated and high-performing sales team. Sales training and development in the insurance sector. Sales leadership in insurance: role of sales leaders in strategy formulation and execution, motivating and managing insurance sales teams. Emerging trends and challenges in insurance sales.

Practical: The learners are required to:

- Critically evaluate the regulatory environment for sale of insurance product in India.
- Design strategic sales objectives and goals for life insurance and non-life insurance.
- Analysis of sales performance of a company of your choice.
- Study of strategic sales management of any insurance company and preparation of a report.
- Evaluation of incentive programs in life insurance companies and non-life insurance companies.
- Analysis of impact of AI on the strategic sales management of insurance products.
- Evaluation of social media in enhancing insurance sales effectiveness.
- The learners are required to do practical exercise from unit 1, 2, 3 & 4.

References

- Anderson, R. E., & Dubinsky, A. J. (2004). *Personal Selling: Achieving Customer Satisfaction and Loyalty*. Houghton Mifflin.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education.
- Kotler, P., Rackham, N., & Krishnaswamy, S. (2006). *Ending the War Between Sales and Marketing*. Harvard Business Review.
- McKinsey & Company. (2022). *Winning in Insurance Sales: Planning for the Future*.
- Porter, M. E. (1996). *What is Strategy?* Harvard Business Review.
- Walker, O. C., & Mullins, J. W. (2014). *Marketing Strategy: A Decision-Focused Approach* (8th ed.). McGraw-Hill Education.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2018). *Services Marketing: Integrating Customer Focus Across the Firm* (7th ed.). McGraw-Hill.

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Semester VIII

Discipline Specific Elective Course -8.3 (Dse-8.3)- International Financial Management

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
INTERNATIONAL FINANCIAL MANAGEMENT (DSE- 8.3)	4	3	-	1	12th	-

Learning Objectives:

- To acquaint students with the conceptual framework of key decision areas in multinational business finance.
- To provide an overview of the financial environment in which multinational firms operate.
- To develop an understanding of financial strategies and challenges faced by multinational corporations.
- To enable students to analyze international financial markets and instruments.

Learning Outcomes

After successful completion of the course, learners will be able to:

- Explain globalization and its importance for multinational financial managers.
- Describe the international monetary system and its role in global finance.
- Outline the functions and workings of foreign exchange markets.
- Apply theories of foreign exchange rate movements.
- Identify foreign exchange risks faced by multinational corporations.
- Recommend strategies to manage foreign exchange risks.
- Determine the cost of capital for multinational firms.
- Propose optimal capital structures for multinational companies.
- Evaluate foreign investments using NPV, IRR, and APV.
- Conduct country risk assessments for financial decision-making.
- Develop strategies for raising funds in international markets.

Course Content

(Theory 45 Hours + 30 hours Practical)

Unit 1: Multinational Business Finance

10 Hours

An overview, agency problem, objectives of the firm and risk management, international financial management and domestic financial management, motivations for international finance. International monetary system- the gold standard, the Bretton woods system, the flexible exchange, alternative exchange rate systems, the European monetary system.

Unit 2: The Foreign Exchange Markets

10 Hours

Functions of the foreign exchange market, the foreign exchange rates- direct and indirect quotations, spot market and forward market, bid- ask spread, interest arbitrage- covered interest arbitrage and interest parity theory, growth of the swap market, interest rate and currency swaps, theories of foreign exchange rate movement and international parity conditions- purchasing power parity, international fisher effect.

Unit 3: Management of Foreign Exchange Risk

10 Hours

Translation exposure, comparison of four translation methods, transaction exposure- measurement and management of transaction exposure, economic exposure- transaction exposure versus economic exposure. Managing foreign operations- eurocurrency markets- eurocurrency interest rates, domestic issues v/s euro issues, international bonds markets, masala bond, external commercial borrowings, performance of Indian Euro issues, GDRs and ADRs.

Unit 4: Financial Management of the Multinational Firm

15 Hours

Cost of capital and capital structure of the multinational firm, cost of capital for MNCs v/s domestic firms, multinational capital budgeting: problems and issues in foreign investment analysis, techniques of multinational capital budgeting-Net Present Value (NPV), Internal Rate of Return (IRR), and Adjusted Present Value (APV).

Practical: The learners are required to:

0. Track daily exchange rates (USD/INR, EUR/USD, GBP/INR) for 10 days/months/years and prepare a report on that.
1. Use live forex data to calculate cross exchange rates and check for any arbitrage opportunities.
2. Use MS. Excel to evaluate a multinational project using NPV and IRR, factoring in exchange rate risk.
3. Take a hypothetical MNC and identify where it faces transaction, translation, and economic exposure and prepare a report on that.
4. Design a comparative matrix evaluating Masala Bonds, ECBs, GDRs, and ADRs across key dimensions such as purpose, risk, cost, and regulatory framework.
5. Conduct a comparative analysis of three countries—such as India, the USA, and Germany—focusing on their exchange rate regimes and central bank policy frameworks.
6. The learners are required to do practical exercise from unit 1, 2, 3 & 4.

References

- Buckley, A. (2009). *Multinational finance* (5th ed.). Pearson Education.
- Shapiro, A. C. (2013). *Multinational financial management* (10th ed.). John Wiley & Sons, Inc.

- Brigham, E. F., & Daves, P. R. (2016). *Intermediate financial management* (12th ed.). South-Western Cengage Learning.
- Resnick, B. G., & Eun, C. S. (2014). *International financial management* (7th ed.). McGraw Hill.
- Hull, J. C., & Basu, S. (2018). *Options, futures, and other derivatives* (10th ed.). Prentice Hall of India.
- Madura, J. (2018). *International financial management* (13th ed.). Cengage Learning India Pvt Ltd.
- Butler, K. C. (2012). *Multinational finance: Evaluating opportunities, costs, risks of operations* (5th ed.). Thomson South-Western.
- Kim, S., & Kim, S. H. (2006). *Global corporate finance: Text & cases* (6th ed.). Blackwell Publishing.
- Levi, M. D. (2018). *International finance* (6th ed.). Routledge.
- Vij, M. (2018). *International financial management* (3rd ed.). Excel Books.
- Data source: <https://www.rbi.org.in/#>