

GURU KASHI UNIVERSITY



POST GRADUATE DIPLOMA IN SUPPLY CHAIN MAN-AGEMENT

SESSION: 2024-25

DEPARTMENT OF MANAGEMENT



Graduate Attributes:

A Post Graduate Diploma in Supply Chain Management (PGDSCM) program aims to equip students with advanced knowledge and skills in managing the flow of goods, services, information, and finances from the point of origin to the point of consumption. The program usually imparts a comprehensive understanding of supply chain processes, strategies, and technologies. Graduates of a PGDSCM program gain a deep understanding of the core concepts of supply chain management, including logistics, procurement, inventory management, and distribution. They are familiar with the entire end-to-end process of a supply chain, from sourcing and production to delivery and customer service. Additionally, they understand the interrelationships between various functions such as purchasing, operations, and marketing, and how they impact the overall supply chain

PROGRAM LEARNING OUTCOMES:

- 1. Demonstrate an advanced understanding of core supply chain concepts, theories, and methodologies, including logistics, procurement, inventory management, and distribution.
- 2. Apply knowledge of end-to-end supply chain processes and their interrelationships to optimize supply chain operations.
- 3. Understand the role of emerging technologies like blockchain, AI, and IoT in modern supply chain management.
- 4. Collaborate with cross-functional teams, suppliers, customers, and other stakeholders to achieve common goals.
- 5. Plan, execute, and oversee supply chain projects from start to finish, ensuring alignment with objectives and timelines.
- 6. Engage with industry resources and networks to stay informed about the latest advancements.

Program Structure (PG Diploma in Supply Chain Management

	Semester: 1 st						
Course Code	Course Title	Type of Course	L	Т	Р	Total Credit s	
GSM101	Supply Chain Optimization	Core	4	0	0	4	
GSM102	Inventory Management and Demand Planning	Core	4	0	0	4	
GSM103	Business Logistics	Core	4	0	0	4	
GSM104	Green Logistics	CF	2	0	0	2	
GSM105	Minor Project	Skill Based	-	-	4	2	
GSM106	Environmental Studies	VAC	2	0	0	2	
GSM199	XXX	MOOC	_	-	-	2	
	Discipline Elec	ctive-I (Any o	one)			1	
GSM107	Global SCM and CRM Strategies	Disciplin	3	0	0	2	
GSM108	Procurement Strategy and Vendor Relations	Elective I	3	0	0	5	
	Discipline Elective-II (Any one)						
GSM109	Supply Chain Analytics	Disciplin ary	3	0	0	3	
GSM110	Supply Chain Resilience	Elective II	3	0	0	5	
	Total					27	
	Seme	ster: 2 ND					
Course Code	Course Title	Type of Course	L	Т	Р	Total Credit s	
GSM201	Sustainable SCM	Core	4	0	0	4	
GSM202	Port and Transportation Management	Core	4	0	0	4	



GSM203	Ethical Supply Chain Management	CF	3	0	0	3
GSM204	Soft Skills & Business Communication	AEC	2	0	0	2
GSM205	Major Project	Skill Based	-	-	8	4
	Discipline Elec	ctive-III (Any	v one)			
GSM206	Industry 4.0 and SCM	Disciplin				
GSM207	Quality Measurement	ary Elective III	3	0	0	3
	Discipline Ele	ctive-IV (Any	v one)			
GSM208	Introduction to SAP	Disciplin	2	0	0	
GSM210	Introduction to SAP (Lab)	ary Elective	0	0	2	3
GSM209	International Trade and Commerce	IV	3	0	0	
	Total					23
	Grand Total					50



EVALUATION CRITERIA FOR THEORY COURSES

- A. Continuous Assessment: [25 Marks]
 - i. CA1: Surprise Test (Two best out of three) (10 Marks)
 - ii. CA2: Assignment(s) (10 Marks)
 - iii. CA3: Portfolio (5 Marks)
- B. Attendance: [5 marks]
- C. Mid Semester Test: [30 Marks]
- D. End-Term Exam: [40 Marks]

L

4

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0

Semester-I

Course Title: Supply Chain Optimization Course Code: GSM101

Total	Hourse	60

14 Hours

14 Hours

17 Hours

15 Hours

Ρ

0

Cr.

04

Learning Outcomes

On the completion of the course, the students will be able to

- 1. Analyze supply chain structures and identify optimization opportunities.
- 2. Apply mathematical models and algorithms to optimize inventory management, production planning, and distribution strategies.
- 3. Evaluate the impact of various supply chain decisions on cost, service levels, and overall performance.
- 4. Utilize simulation and decision support tools to assess and improve supply chain operations.
- 5. Develop strategies for risk mitigation and resilience in supply chain networks.

Course Content

UNIT I

Supply Chain Optimization - Overview, concept, importance and scope.

Supply chain network design and configuration - Network design principles, configuration strategies, role of optimization in network design.

Efficiency and responsiveness - Efficiency metrics, responsiveness metrics, case studies on optimization impact.

UNIT II

Inventory Optimization- Economic Order Quantity (EOQ), safety stock, reorder points.

Multi-echelon inventory optimization - Inventory optimization, supply chain coordination, Dynamic inventory management models, stochastic demand forecasting

UNIT III

Production Planning and Scheduling- meaning, importance, Capacity planning methods, scheduling algorithms, resource allocation.

Just-in-Time (JIT) concepts, Lean production principles, Lean manufacturing tools, waste reduction strategies.

Production mix optimization, batch sizing models, scheduling sequences.

UNIT IV

Distribution and Logistics Optimization - Transportation optimization, Route optimization, vehicle routing problems, transportation modes.

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Warehouse location and layout optimization- Facility location models, warehouse layout design, inventory storage strategies

Urban logistics - Last-mile delivery optimization, challenges, urban logistics solutions, optimization tools for delivery networks.

Transaction Mode

Problem solving learning, Case Analysis, Cooperative Teaching, Inquiry based learning, Visualization, Group discussion, Active participation **Suggested Readings**

- Mollov, D. (2020). Strategic Supply Chain Management with the Balanced Scorecard. Economic Alternatives, (2), 283-299.
- Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (1999). Designing and managing the supply chain: Concepts, strategies, and cases. New York: McGraw-hill.
- Snyder, L. V., & Shen, Z. J. M. (2019). Fundamentals of supply chain theory. John Wiley & Sons.
- Snyder, L. V., Scaparra, M. P., Daskin, M. S., & Church, R. L. (2006). Planning for disruptions in supply chain networks. In Models, methods, and applications for innovative decision making (pp. 234-257). Informs.

Course Title: Inventory Management and Demand Planning Course Code: GSM102

L	Т	Р	Cr.
4	0	0	04

Total Hours: 60

Learning Outcomes On the completion of the course, the students will be able to

1. Analyze various inventory management techniques and their application in different business contexts.

2. Apply demand forecasting methods to predict future demand patterns accurately.

3. Design inventory control systems to optimize inventory levels while ensuring customer service levels.

4. Evaluate the role of information technology in enhancing inventory management and demand planning processes.

5. Implement strategies for managing supply chain uncertainties and mitigating associated risks.

Course Content UNIT I

Introduction to Inventory Management, Overview of inventory management principles, Classification of inventory types, Inventory costs and their



implications. Inventory control techniques: ABC analysis, EOQ model, safety stock, reorder point.

UNIT II

15 Hours

15 Hours

18 Hours

Demand Forecasting Techniques, Types of demand forecasting methods.

Time series analysis: moving averages, exponential smoothing, trend analysis. Causal forecasting methods: regression analysis, leading indicators. Judgmental forecasting techniques: Delphi method, market research, expert opinion.

UNIT III

Inventory Control Systems, Deterministic and stochastic inventory models.

Continuous vs. periodic review systems. Material requirements planning (MRP) and enterprise resource planning (ERP) systems. Just-in-Time (JIT) and lean inventory management principles.

UNIT IV

Role of information technology in inventory management, Inventory management software and tools. Automated inventory tracking systems: RFID, barcoding., Integration of inventory management systems with supply chain management software. Supply Chain Uncertainties and Risk Management: Sources of supply chain uncertainties, Risk assessment and mitigation strategies, Inventory optimization under uncertainty: simulation modeling, scenario analysis.

Transaction Mode

Lectures, Case studies, Group discussions, Practical exercises, Guest lectures from industry experts

Suggested Readings

- 1. Mollov, D. (2020). Strategic Supply Chain Management with the Balanced Scorecard. Economic Alternatives, (2), 283-299.
- 2. Silver, E. A., Pyke, D. F., & Peterson, R. (1998). Inventory management and production planning and scheduling (Vol. 3, p. 30). New York: Wiley.
- 3. Colangelo, R. (2005). Spend management e procurement management. La gestione della domanda interna e degli acquisti per migliorare i risultati aziendali (Vol. 609). FrancoAngeli.
- 4. Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (1999). Designing and managing the supply chain: Concepts, strategies, and cases. New York: McGraw-hill.
- 5. Chopra, S., & Sodhi, M. S. (2014). Reducing the risk of supply chain disruptions. MIT Sloan management review.



Course	Title:	Business	Logistics
Course	Code:	GSM103	

L	Т	Р	Cr.
4	0	0	04

Total Hours: 60

Learning Outcomes

On the completion of the course, the students will be able to 1. Understand the fundamental concepts and principles of logistics in a business context.

2. Analyze the role of logistics in supply chain management and its impact on overall business operations.

3. Apply logistics strategies to optimize transportation, warehousing, and inventory management.

4. Evaluate the importance of information technology and data analytics in modern logistics practices.

5. Design and implement effective logistics plans to enhance customer satisfaction and competitive advantage.

Course Content

UNIT I

Introduction to Business Logistics: Definition and scope of logistics., Evolution and historical development of logistics.

Functions and objectives of logistics management., Role of logistics in enhancing business efficiency and profitability.

UNIT II

Transportation Management: Modes of transportation: road, rail, air, water, pipeline, Transportation planning and routing.

Carrier selection and negotiation, Last-mile delivery and urban logistics challenges.

UNIT III

Warehousing and Distribution, Warehouse design and layout optimization.

Inventory management within warehouses, Order picking and packing processes. Cross-docking and distribution center operations.

UNIT IV

Inventory Management in Logistics: Inventory control techniques and models, Just-in-Time (JIT) and lean inventory principles, ABC analysis and EOQ model. Technology in Logistics: Role of information technology in logistics, Warehouse management systems (WMS) and transportation management systems (TMS), RFID, barcode, and IoT applications in logistics, Data analytics and predictive modeling for logistics optimization.

14 Hours

14 Hours

14 Hours



Transaction Mode

Lectures, Case studies, Group discussions, Practical exercises, Field trips to logistics facilities

Suggested Readings

1. Coyle, J. J., Novack, R. A., Gibson, B. J., & Langley, C. J. (2021). Supply chain management: a logistics perspective. Cengage Learning.

2. Bowersox, D. J., Closs, D. J., Cooper, M. B., & Bowersox, J. C. (2020). Supply chain logistics management. Mcgraw-hill.

3. Christopher, M., Peck, H., & Towill, D. (2006). A taxonomy for selecting global supply chain strategies. The International Journal of Logistics Management, 17(2), 277-287.

4. Rushton, A., Croucher, P., & Baker, P. (2022). The handbook of logistics and distribution management: Understanding the supply chain. Kogan Page Publishers.

5. Van Hoek, R. (2008). Logistics management and strategy: competing through the supply chain. Pearson Education UK.

Course Title: Green Logistics	L	Т	Р	Cr.	
Course Code: GSM104	2	0	0	02	

Total Hours: 30

Learning Outcomes

- 1. Understand the principles and concepts of green logistics and its importance in sustainable supply chain management.
- 2. Analyze the environmental impact of logistics activities and identify opportunities for improvement.
- 3. Apply green logistics strategies to minimize carbon emissions, reduce waste, and conserve natural resources.
- 4. Evaluate the role of renewable energy, alternative fuels, and green technologies in logistics operations.
- 5. Design and implement environmentally-friendly logistics practices to achieve corporate sustainability goals.

Course Content

UNIT I

Introduction to Green Logistics: Definition and significance of green logistics, Evolution and development of sustainable logistics practices. Environmental challenges and regulatory frameworks in logistics. Business case for green logistics: economic, social, and environmental benefits.

UNIT II

GURU KAS

UNJAB - INDIA

Environmental Impact of Logistics Operations: Carbon footprint analysis and emissions reduction strategies. Energy consumption and efficiency in transportation and warehousing, Waste management and recycling initiatives Life cycle assessment (LCA) of logistics activities.

UNIT III

Sustainable Transportation and Fleet Management: Green transportation modes, electric vehicles, hybrid fleets, biofuels. Route optimization and vehicle scheduling for fuel efficiency. Eco-driving techniques and driver training programs, Performance measurement and benchmarking in fleet sustainability.

UNIT IV

Eco-friendly Warehousing and Packaging, Green warehouse design and construction, Energy-efficient lighting and HVAC systems. Sustainable materials handling equipment, Environmentally-friendly packaging solutions: recyclable, biodegradable, and reusable packaging. Green Supply Chain Collaboration and Innovation: Supplier engagement and sustainability initiatives, Collaboration with stakeholders for green logistics projects, Innovation in green technologies and practices.

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

Suggested Readings

1. McKinnon, A., Browne, M., Whiteing, A., & Piecyk, M. (Eds.). (2015). Green logistics: Improving the environmental sustainability of logistics. Kogan Page Publishers.

2. Seuring, S. (2010). Sustainability management beyond corporate boundaries. Journal of Cleaner Production, 18(10), 1118.

3. Sarkis, J., Gonzalez, E. D. S., & Koh, S. L. (2019). Effective multi-tier supply chain management for sustainability. International Journal of Production Economics, 217, 1-10.

4. Verdecho, M. J., Alarcón-Valero, F., Pérez-Perales, D., Alfaro-Saiz, J. J., & Rodríguez-Rodríguez, R. (2021). A methodology to select suppliers to increase sustainability within supply chains. Central European Journal of Operations Research, 29, 1231-1251.

5. CHAIN, R. O. G. S. MUHAMMAD SHABIR SHAHARUDIN.

7 Hours

8 Hours



Course Title: Minor Project Work Course Code: GSM105

L	Т	Р	Cr.
0	0	4	2

Learning Outcomes

- 1. Apply theoretical knowledge and practical skills to complete a project on a given topic.
- 2. Demonstrate research and analytical skills in collecting and analyzing data for the project.
- 3. Develop effective project management and organization skills.
- 4. Enhance presentation and communication skills through project documentation and presentation.
- 5. Collaborate with peers and faculty to exchange ideas and feedback during the project development process.

Course Description

The Minor Project Work course provides students with an opportunity to apply their knowledge and skills acquired throughout their academic program to complete a project on a specific topic within the field of study. Students will work individually or in small groups under the guidance of a faculty mentor to conduct research, gather data, analyze findings, and present their project outcomes in a prescribed format.

Course content

The content of the course will vary depending on the chosen topic for the minor project. Students will be provided with detailed instructions, guidelines, and templates for developing their project files. The project topics may cover various areas within the domain of the academic program.

Transaction Mode

Orientation session, Research and data collection, Project development, Progress review sessions, Presentation and submission.

Suggested Readings

- 1. David, M., & Sutton, C. D. (2011). Social research: An introduction. Sage.
- 2. Bell, J., & Waters, S. (2018). Doing Your Research Project: A guide for first-time researchers. McGraw-hill education (UK).
- 3. Walliman, N. (2021). Research methods: The basics. Routledge.
- 4. Kumar, R. (2018). Research methodology: A step-by-step guide for beginners. Research methodology, 1-528.



Course Title: Environmental Studies Course Code: GSM106

L	Т	Р	Cr.
2	0	0	2

Total Hours: 30

Learning Outcomes

- 1. Understand the fundamental concepts of environmental studies and their relevance to society.
- 2. Analyze the interconnectedness of ecological systems and human activities.
- 3. Evaluate environmental issues such as pollution, climate change, biodiversity loss, and resource depletion.
- 4. Identify sustainable practices and solutions for mitigating environmental degradation.

Course Content

UNIT I

Introduction to Environmental Studies: Definition, scope, and importance of environmental studies, Components of the environment: biotic and abiotic factors. Ecosystem structure and function, Principles of sustainability and sustainable development.

UNIT II

Environmental Issues and Challenges, Pollution: types, sources, and impacts (air, water, soil, noise). Climate change: causes, consequences, and mitigation strategies, Biodiversity conservation and loss. Natural resource depletion: water, energy, minerals, and land.

UNIT III

Environmental Policies and Governance, International environmental agreements and protocols. National environmental legislations and regulatory frameworks, Role of government agencies, NGOs, and civil society in environmental governance. Environmental impact assessment (EIA) and environmental management systems (EMS).

UNIT IV

Sustainable Development and Green Technologies, Principles of sustainable development: social, economic, and environmental dimensions, Green technologies and eco-friendly innovations. Renewable energy sources: solar, wind, hydro, and biomass, Waste management and recycling practices.

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

Suggested Readings

6 Hours

8 Hours

9 Hours



1. Cunningham, W. P., Cunningham, M. A., & Saigo, B. W. (2001). Environmental science: A global concern (Vol. 412). New York: McGraw-Hill.

2. Miller, K. K., & Jorre De St Jorre, T. (2022). Digital micro-credentials in environmental science: an employer perspective on valued evidence of skills. Teaching in Higher Education, 1-17.

3. Enger, E. D., Smith, B. F., Enger, E. D., & Smith, B. (1995). Environmental science. William C Brown Communica.

4. DesJardins, J. R. (2013). Environmental ethics: An introduction to environmental philosophy. Cengage Learning.

Course Title: Global SCM and CRM Strategies Course Code: GSM107

L	Т	Р	Cr.
3	0	0	03

Total Hours: 45

Learning Outcomes

- 1. Understand the fundamental concepts of global supply chain management (SCM) and corporate social responsibility (CSR) and their significance in modern business.
- 2. Analyze the interconnectedness between supply chain activities and societal and environmental impacts.
- 3. Evaluate the role of CSR in shaping sustainable supply chain practices and organizational competitiveness.
- 4. Identify key challenges and opportunities in implementing CSR strategies across global supply chains.

Course Content

UNIT I

Introduction to Global Supply Chain Management: Overview of global supply chain management concepts and frameworks. Importance of globalization and international trade in shaping global supply chains, Interconnectedness between supply chain activities, stakeholders, and environmental and social impacts. Integration of sustainability principles into global SCM strategies.

Case Study: Container Corporation of India (CONCOR) - Understanding the role of logistics in global supply chains.

UNIT II

Corporate Social Responsibility (CSR) Fundamentals: Definition, scope, and significance of corporate social responsibility (CSR) in modern business.

11 Hours



Ethical sourcing and responsible procurement practices in global supply chains. Environmental sustainability initiatives and social welfare programs, Stakeholder engagement and community involvement in CSR strategies.

Case Study: Coca-Cola - Analysis of CSR initiatives and sustainability efforts.

UNIT III

9 Hours

Sustainable Supply Chain Practices: Sustainable procurement and supplier relationship management. Green logistics and transportation strategies for reducing carbon footprint. Circular economy principles and waste reduction strategies in supply chain operations.

Case Study: E-Choupal - Sustainable sourcing and empowering rural farmers.

UNIT IV

15 Hours

CSR Integration and Stakeholder Engagement: Strategies for integrating CSR principles into supply chain governance and decision-making processes.

Collaborative partnerships with suppliers, customers, and NGOs to drive CSR initiatives, Transparency and reporting mechanisms for monitoring and evaluating CSR performance. Industry trends and emerging practices in CSR-driven supply chain management. Case Study: Hub and Spoke Model - Implementation in logistics and supply chain efficiency.

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

Suggested Readings

- Winch, J. K. (2003). Supply chain management: strategy, planning, and operation. International Journal of Quality & Reliability Management, 20(3), 398-400.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: moving toward new theory. International journal of physical distribution & logistics management, 38(5), 360-387.
- Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. Journal of cleaner production, 16(15), 1699-1710.
- Nel, J. D., & Badenhorst-Weiss, J. A. (2010). Supply chain design: Some critical questions. Journal of Transport and Supply Chain Management, 4(1), 198-223.
- Baisya, R. K. (2020). *Global Supply Chain Management*. Sage Publications India Pvt Ltd.
- Shah, J. (2009). Supply Chain Management: Text and Cases. Pearson Education India.



- Mohanty, R. P., & Deshmukh, S. G. (2005). *Essentials of Supply Chain Management*. Jaico Publishing House.
- Baxi, C. V., & Prasad, A. (Eds.). (2005). *Corporate Social Responsibility: Concepts and Cases: The Indian Experience*. Excel Books.
- Mitra, N., & Schmidpeter, R. (Eds.). (2021). Corporate Social Responsibility in India: Cases and Developments After the Legal Mandate. Springer.

Course Title: Procurement Strategy and Vendor Relations Course Code: GSM108

L	T	Р	Cr.
3	0	0	03

Total Hours: 45

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Understand the role and significance of procurement strategy in organizational success.
- 2. Analyze various procurement models and their applicability in different industries and contexts.
- 3. Develop strategic sourcing plans to optimize procurement processes and enhance supply chain efficiency.
- 4. Evaluate vendor selection criteria and establish effective vendor relations for sustainable partnerships.
- 5. Demonstrate negotiation skills and contract management techniques in procurement activities.

Course Content

UNIT I

Introduction to Procurement Strategy: Overview of procurement function and its strategic importance in business operations, Evolution of procurement from transactional to strategic function. Procurement as a value driver: cost reduction, risk management, and supplier innovation. Linkages between procurement strategy and organizational goals and objectives.



Strategic Sourcing and Supplier Management: Strategic sourcing process: analysis, strategy development, execution, and performance management.

Make vs. buy decision-making frameworks and outsourcing strategies, Supplier segmentation and performance measurement criteria. Supplier relationship management (SRM) strategies for enhancing collaboration and value creation.

UNIT III

Vendor Selection and Contract Negotiation: Vendor evaluation and selection criteria: cost, quality, reliability, and sustainability. Contract negotiation techniques and best practices, Legal considerations in procurement contracts: terms and conditions, warranties, and liabilities. Risk management strategies in vendor contracts: mitigation, transfer, and acceptance.

UNIT IV

10 Hours

11 Hours

Supplier Diversity and Sustainable Procurement: Importance of supplier diversity programs in promoting inclusivity and innovation, Sustainable procurement practices: environmental, social, and ethical considerations.

Green procurement initiatives and certifications (e.g., LEED, Fair Trade).

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

Suggested Readings

- Benton Jr, W. C. (2020). Purchasing and supply chain management. Sage Publications.
- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2021). Purchasing & supply chain management. Cengage Learning.
- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2021). Purchasing & supply chain management. Cengage Learning.
- Johnson, F., Leenders, M. R., & Flynn, A. E. (2021). Purchasing and supply management. McGraw-Hill Companies, Inc.

Course Title: Supply Chain Analytics Course Code: GSM109

L	Т	Р	Cr.
3	0	0	03

Total Hours: 45

Learning Outcomes

Upon completing the course, students will be able to:

18

1. Understand the role and significance of analytics in supply chain management.

2. Analyze supply chain data using various statistical and analytical techniques.

3. Apply predictive analytics to forecast demand and optimize inventory levels.

4. Utilize descriptive and prescriptive analytics to improve supply chain efficiency and decision-making.

Course Content

UNIT I

Introduction to Supply Chain Analytics: Overview of supply chain analytics: definitions, scope, and applications. Role of analytics in enhancing supply chain visibility and performance. Key metrics and performance indicators in supply chain management. Introduction to data-driven decision-making and its impact on supply chain operations.

UNIT II

Descriptive Analytics in Supply Chain Management: Data visualization techniques for supply chain analysis: charts, graphs, and dashboards.

Exploratory data analysis (EDA) methods for uncovering patterns and trends in supply chain data, Inventory optimization using descriptive analytics: ABC analysis, cycle counting, and safety stock calculations. Supply chain mapping and process optimization through descriptive analytics tools.

UNIT III

Predictive Analytics for Demand Forecasting: Time series forecasting methods: moving averages, exponential smoothing, and trend analysis.

Regression analysis for demand forecasting: simple linear regression and multiple regression models. Demand sensing techniques using machine learning algorithms and artificial intelligence, Inventory optimization and replenishment strategies based on predictive analytics insights.

UNIT IV

Prescriptive Analytics for Supply Chain Optimization: Optimization models in supply chain management: linear programming, integer programming, and network optimization.

Simulation modeling for risk assessment and scenario analysis in supply chain operations, Decision support systems (DSS) and prescriptive analytics tools for supply chain optimization.

Case studies on the application of prescriptive analytics in real-world supply chain scenarios.

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

13 Hours

10 Hours

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10 Hours



Suggested Readings

- Mikkonen, A. (2023). Utilizing Data in Inventory Management.
- Chowdhury, A. (2021). Supply chain resilience and risk management strategies and methods (Master's thesis, A. Chowdhury).
- Karwasra, K., Soni, G., Mangla, S. K., & Kazancoglu, Y. (2021). Assessing dairy supply chain vulnerability during the Covid-19 pandemic. International Journal of Logistics Research and Applications, 1-19.
- Hugos, M. H. (2024). Essentials of supply chain management. John Wiley & Sons.

Course Title: Supply Chain Resilience Course Code: GSM110

L	Т	Р	Cr.
3	0	0	03

Total Hours: 45

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Understand the concept of supply chain resilience and its importance in modern business environments.
- 2. Identify vulnerabilities and risks within supply chains and develop strategies for mitigating them.
- 3. Analyze the impact of disruptions on supply chain performance and develop contingency plans.
- 4. Evaluate different approaches to building resilient supply chains, including redundancy, flexibility, and collaboration.

Course Content

UNIT I

Introduction to Supply Chain Resilience: Definition and significance of supply chain resilience. Drivers of supply chain vulnerability: globalization, outsourcing, and complexity, Theoretical foundations of resilience: adaptive capacity, robustness, and recovery capability.

UNIT II

Risk Assessment and Mitigation Strategies: Identification and assessment of supply chain risks: natural disasters, geopolitical factors, and operational disruptions. Risk management frameworks and methodologies: risk mapping, risk prioritization, and risk mitigation strategies.

10 Hours

Supply chain risk mitigation techniques: inventory buffers, dual sourcing, and supplier diversification. Business continuity planning (BCP) and disaster recovery strategies for enhancing supply chain resilience.

UNIT III

Building Resilient Supply Chains: Redundancy vs. flexibility: trade-offs and considerations in supply chain design. Agile and responsive supply chain strategies for adapting to changing market conditions, Collaborative resilience: partnerships, alliances, and information sharing among supply chain partners. Technology-enabled resilience: digitalization, data analytics, and real-time visibility in supply chain operations.

UNIT IV

10 Hours

12 Hours

Resilience Testing and Continuous Improvement: Simulation modeling for assessing supply chain resilience: scenario planning and stress testing.

Post-event analysis and lessons learned: root cause analysis and corrective actions. Continuous improvement in supply chain resilience: feedback loops, monitoring, and adaptive strategies.

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

Suggested Readings

- 1. Sheffi, Y. (2005). The resilient enterprise: overcoming vulnerability for competitive advantage. Pearson Education India.
- 2. Chopra, S., & Sodhi, M. S. (2014). Reducing the risk of supply chain disruptions. MIT Sloan management review.
- 3. Pettit, T. J., Croxton, K. L., & Fiksel, J. (2013). Ensuring supply chain resilience: development and implementation of an assessment tool. Journal of business logistics, 34(1), 46-76.
- 4. Wagner, S. M., & Bode, C. (2008). An empirical examination of supply chain performance along several dimensions of risk. Journal of business logistics, 29(1), 307-325.

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21

Semester-II

Course Title: Sustainable Supply Chain Management Course Code: GSM201

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15 Hours

15 Hours

15 Hours

Cr.

04

Т

0

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Understand the principles and concepts of sustainable supply chain management (SSCM).
- 2. Analyze the environmental, social, and economic impacts of supply chain activities.
- 3. Evaluate strategies for integrating sustainability into supply chain design, operations, and sourcing decisions.
- 4. Identify key drivers and challenges of implementing sustainable practices in global supply chains.

Course Content

UNIT I

Introduction to Sustainable Supply Chain Management: Definition and scope of sustainable supply chain management. Triple bottom line approach: environmental, social, and economic dimensions of sustainability, Sustainable development goals (SDGs) and their relevance to supply chain management. Business case for sustainability: competitive advantages and stakeholder expectations.

UNIT II

Environmental Sustainability in Supply Chains: Environmental impacts of supply chain activities: carbon emissions, energy consumption, and waste generation. Sustainable sourcing and procurement practices: green purchasing, life cycle assessment (LCA), and eco-labeling, Sustainable logistics and transportation: green warehousing, alternative fuels, and route optimization. Circular economy principles: resource recovery, product remanufacturing, and closed-loop supply chains.

UNIT III

Social Responsibility and Ethical Practices: Labor rights and working conditions in supply chains: fair labor standards, ethical sourcing, and supply chain transparency. Human rights and social justice issues: community engagement, diversity and inclusion, and conflict minerals, Corporate social responsibility (CSR) initiatives: philanthropy, stakeholder engagement, and supply chain ethics. Ethical decision-making frameworks: moral philosophies, codes of conduct, and ethical leadership.

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UNIT IV

15 Hours

Economic Sustainability and Supply Chain Governance: Economic aspects of sustainability: cost-benefit analysis, value creation, and sustainable business models. Supply chain risk management and resilience: risk assessment, contingency planning, and business continuity. Governance structures for sustainable supply chains: regulatory compliance, industry standards, and certifications. Sustainable procurement and supplier relationship management: ethical sourcing, supplier audits, and supplier development.

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

Suggested Readings

- 1. Khalid, R. U., & Seuring, S. (2019). Analyzing base-of-the-pyramid research from a (sustainable) supply chain perspective. Journal of Business Ethics, 155, 663-686.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: moving toward new theory. International journal of physical distribution & logistics management, 38(5), 360-387.
- 3. Sarkis, J. (2012). A boundaries and flows perspective of green supply chain management. Supply chain management: an international journal, 17(2), 202-216.
- 4. Handfield, R., Sroufe, R., & Walton, S. (2005). Integrating environmental management and supply chain strategies. Business strategy and the environment, 14(1), 1-19.

Course Title: Port and Transportation Management Course Code: GSM202

L	Т	Р	Cr.
4	0	0	04

Total Hours: 60

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Understand the role and significance of ports in global trade and transportation networks.
- 2. Analyze the key functions and operations of ports and terminal facilities.
- 3. Evaluate the different modes of transportation and their integration within supply chains.

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 - 4. Identify challenges and opportunities in port management, including environmental sustainability and digitalization.

Course Content

UNIT I

Introduction to Port Management: Definition and functions of ports: gateways for international trade and transportation. Types of ports: seaports, inland ports, and dry ports: Port governance and regulatory frameworks: port authorities, terminal operators, and port community systems.

Port infrastructure and facilities: terminals, berths, quays, and storage yards.

UNIT II

Port Operations and Logistics: Port planning and design considerations: layout optimization, berth allocation, and terminal capacity planning.

Cargo handling equipment and technologies: cranes, forklifts, conveyor systems, and automated guided vehicles (AGVs). Port security and risk management: maritime security initiatives, container screening, and risk assessment. Intermodal transportation and hinterland connectivity: rail, road, and inland waterway networks.

UNIT III

Transportation Modes and Modal Shift: Overview of transportation modes: maritime shipping, air cargo, road transport, rail freight, and intermodal transport. Port hinterland connections: feeder services, short sea shipping, and inland water transport, Modal shift strategies and sustainable transportation initiatives: reducing carbon emissions and congestion.

Freight forwarding and multimodal transportation management: door-to-door logistics solutions.

UNIT IV

Port Economics and Digitalization: Economic principles of port management: port pricing, tariffs, and revenue management. Port competitiveness and performance measurement: benchmarking, key performance indicators (KPIs), and port productivity, Digital transformation in port management: port community systems, blockchain technology, and smart port initiatives.

Environmental sustainability in port operations: green port initiatives, emissions reduction, and renewable energy adoption.

Transaction Mode

Lectures, Case studies, Group discussions, Workshops and seminars, Guest lectures by industry experts

Suggested Readings

- 1. Notteboom*, T. E., & Rodrigue, J. P. (2005). Port regionalization: towards a new phase in port development. Maritime Policy & Management, 32(3), 297-313.
- 2. Stopford, M. (2009). Maritime Economics Routledge. New York, USA.

13 Hours

16 Hours

15 Hours



- 3. Hesse, M., & McDonough, E. (2018). Ports, cities and the global maritime infrastructure. In Handbook on the geographies of globalization (pp. 354-366). Edward Elgar Publishing.
- 4. Monios, J. (2020). Environmental governance in shipping and ports: Sustainability and scale challenges. Maritime transport and regional sustainability, 13-29.

Course Title: Ethical Supply Chain Management Course Code: GSM203

L	Т	Р	Cr.
3	0	0	03

Total Hours: 45

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Understand the ethical dimensions of supply chain management and their importance in organizational sustainability.
- 2. Analyze ethical issues and challenges faced by supply chain professionals, including labor rights, environmental stewardship, and fair trade practices.
- 3. Evaluate ethical decision-making frameworks and their application in supply chain operations.
- 4. Identify strategies for promoting transparency, accountability, and integrity across supply chain networks.
- 5. Demonstrate ethical leadership skills and advocacy for responsible supply chain practices.

Course Content

UNIT I

Introduction to Ethical Supply Chain Management: Definition and significance of ethical supply chain management (ESCM). Ethical dilemmas in supply chain decision-making: conflicts of interest, social responsibility, and corporate governance. Stakeholder perspectives on supply chain ethics: employees, suppliers, customers, and local communities. Business case for ethical supply chain management: risk mitigation, brand reputation, and stakeholder trust.

UNIT II

Ethical Issues in Supply Chain Operations: Labor practices and human rights: fair wages, working conditions, and supply chain transparency.

Environmental sustainability and corporate social responsibility (CSR) in supply chains: green procurement, carbon footprint reduction, and waste management. Ethical sourcing and supplier relations: combating corruption, promoting diversity, and ensuring fair trade, Conflict minerals and

15 Hours



responsible sourcing: ethical implications of raw material extraction and supply chain traceability.

UNIT III

8 Hours

Ethical Decision-Making in Supply Chain: Ethical frameworks and decisionmaking models: utilitarianism, deontology, virtue ethics, and stakeholder theory. Supply chain risk assessment and ethical risk management strategies, Ethical procurement practices: supplier code of conduct, due diligence, and supplier audits, Whistleblowing and ethical reporting mechanisms: protecting ethical whistleblowers and promoting transparency.

UNIT IV

7 Hours

Promoting Ethical Supply Chain Practices: Corporate governance and ethical leadership: fostering a culture of integrity and accountability.

Supply chain transparency and disclosure: sustainability reporting, ethical labeling, and certification schemes. Collaborative approaches to ethical supply chain management: industry initiatives, multi-stakeholder partnerships, and collective action. Continuous improvement and ethical performance measurement: monitoring, evaluation, and benchmarking.

Transaction Mode

Lectures and seminars, Case studies and group discussions, Guest lectures by industry experts and NGOs

Suggested Readings

- 1. Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: moving toward new theory. International journal of physical distribution & logistics management, 38(5), 360-387.
- 2. Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. Journal of cleaner production, 16(15), 1699-1710.
- 3. Pagell, M., & Wu, Z. (2009). Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. Journal of supply chain management, 45(2), 37-56.
- Gold, S., Seuring, S., & Beske, P. (2010). Sustainable supply chain management and inter- organizational resources: a literature review. Corporate social responsibility and environmental management, 17(4), 230-245

Course Title: Soft Skills & Business Communication Course Code: GSM204

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Develop proficiency in fundamental soft skills essential for professional success.
- 2. Enhance communication skills for effective business interactions.
- 3. Cultivate interpersonal skills necessary for teamwork and collaboration.
- 4. Demonstrate competence in written and oral communication for various business contexts.

Course Content

UNIT I

Introduction to Soft Skills: Definition and importance of soft skills, Selfawareness and self-management. Emotional intelligence in the workplace

UNIT II

Effective Communication Strategies: Principles of effective communication

Verbal and nonverbal communication, Active listening and feedback techniques

UNIT III

Interpersonal Skills and Teamwork: Building rapport and trust, Conflict resolution and negotiation skills. Team dynamics and collaboration

UNIT IV

Business Writing and Presentation Skills: Professional email etiquette

Report writing and business correspondence, Delivering persuasive presentations

Transaction Mode

Interactive lectures, workshops, and role-plays, Group discussions and case studies, Mock interviews and presentation exercises, Guest speakers from industry sharing insights and experiences

Suggested Readings

1. Carnegie, D. (2022). How to win friends and influence people. DigiCat.

2. Covey, S. R. (2020). The 7 habits of highly effective people. Simon & Schuster.

3. Guffey, M. E., & Loewy, D. (2019). Essentials of business communication. Cengage Learning.

L	Т	Р	Cr.
2	0	0	02

Total Hours: 30

6 Hours

6 Hours

11 Hours





4. Sabanci, A., Sahin, A., & Özdemir, I. (2018). The Correlation between Interpersonal Communication Skills of Inspection Groups and Their Conflict Management Strategies. Online Submission, 4(4), 176-196.

5. Paul, R., & Elder, L. (2013). Critical Thinking: Tools for Taking Charge of Your Learning and Your Life: Pearson New International Edition. Pearson Higher Ed.Top of Form

Course Title: Major Project Work	L	Т	Р	Cr.
Course Code: GSM205	0	0	8	04

Learning Outcomes

- 1. Formulate a comprehensive research proposal outlining the objectives, methodology, and expected outcomes of the project.
- 2. Conduct in-depth research and analysis within a specific domain of study.
- 3. Demonstrate advanced problem-solving and critical thinking skills in addressing real-world challenges.
- 4. Develop project management skills including planning, execution, and monitoring.
- 5. Present and defend the project findings effectively through written reports and oral presentations.

Course Description

The Major Project Work course is designed to enable students to undertake an extensive research project in their chosen field of study. Students will work independently or in teams under the guidance of a faculty supervisor to conceptualize, plan, execute, and report on their research endeavors. The project topics may encompass various aspects of the discipline and require originality, innovation, and scholarly rigor.

Course content

The content of the course will vary depending on the chosen topic for the major project. Students will be required to develop a detailed research proposal outlining the research questions, objectives, methodology, literature review, and expected outcomes. The project work will involve data collection, analysis, interpretation, and synthesis of findings, culminating in the preparation of a comprehensive project report.

Transaction Mode

Orientation session, Research and data collection, Project development, Progress review sessions, Presentation and submission.

Suggested Readings



- 1. Bell, J., & Waters, S. (2018). Doing Your Research Project: A guide for first-time researchers. McGraw-hill education (UK).
- 2. Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- 3. Saunders, M., Lewis, P., & Thornhill, A. (2003). Research methods forbusiness students. Essex: Prentice Hall: Financial Times.
- 4. Yin, R. K. (2018). Case study research and applications (Vol. 6). Thousand Oaks, CA: Sage.

Course Title: Industry 4.0 and Supply Chain Management Course Code: GSM206

L	Т	Р	Cr.
3	0	0	03

Total Hours: 45

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Understand the concepts and principles of Industry 4.0 and its impact on supply chain management (SCM).
- 2. Analyze the integration of digital technologies in different stages of the supply chain.
- 3. Evaluate the role of data analytics, Internet of Things (IoT), and artificial intelligence (AI) in optimizing supply chain processes.
- 4. Apply Industry 4.0 tools and techniques to enhance supply chain efficiency, visibility, and resilience.
- 5. Discuss the challenges and opportunities of implementing Industry 4.0 in supply chain operations.

Course Content

UNIT I

Introduction to Industry 4.0: Evolution of industry and manufacturing paradigms, Core technologies of Industry 4.0 (IoT, AI, big data, etc.), Implications of Industry 4.0 on global supply chains.

UNIT II

Digital Transformation in Supply Chain Management: Overview of supply chain management (SCM) Digitalization of supply chain processes, Supply chain visibility and transparency

UNIT III

Data Analytics and Predictive Modeling in SCM: Role of data analytics in supply chain decision-making Predictive modeling for demand forecasting and inventory optimization, Real-time monitoring and analytics for supply chain performance

15 Hours

13 Hours

28



UNIT IV

19 Hours

Internet of Things (IoT) and Smart Manufacturing: IoT applications in supply chain operations, Smart sensors and connected devices for asset tracking and management. AI-powered predictive analytics and prescriptive insights, Autonomous systems and robotics in warehouses and distribution centers

AI-driven supply chain risk management and mitigation strategies

Transaction Mode

Interactive lectures, workshops, and role-plays, Group discussions and case studies, Mock interviews and presentation exercises, Guest speakers from industry sharing insights and experiences

Suggested Readings

1. Pascual, D. G., Daponte, P., & Kumar, U. (2019). Handbook of Industry 4.0 and smart systems. CRC Press.

2. Bream, C. (2022). The United States supply chain crisis: A case for responsiveness..

3. Ivanov, D., & Dolgui, A. (2021). A digital supply chain twin for managing the disruption risks and resilience in the era of Industry 4.0. Production Planning & Control, 32(9), 775-788..

4. Kagermann, H., Wahlster, W., & Helbig, J. (2013). Recommendations for implementing the strategic initiative INDUSTRIE 4.0. Forschungsunion and acatech..

5. Fotiadis, T., Folinas, D., Vasileiou, K., & Konstantoglou, A. (2022). Marketing and the customer value chain: integrating marketing and supply chain management. Routledge.

Course Title: Quality Measurement Course Code: GSM207

L	Т	Р	Cr.
3	0	0	03

Total Hours: 45

Learning Outcomes

Upon completing the course, students will be able to:

1. Understand the concept, principles, and history of Six Sigma.

2. Describe the DMAIC (Define, Measure, Analyze, Improve, and Control) methodology and its application in process improvement.

3. Identify key roles and responsibilities within a Six Sigma project team.

4. Apply basic statistical tools and techniques used in Six Sigma projects.

5. Evaluate the benefits and challenges of implementing Six Sigma in various industries.

Course Content

UNIT I

Introduction to Six Sigma: Origins and evolution of Six Sigma, Key concepts: variation, defects, processes, and customer focus. DMAIC methodology, Project selection criteria and scope definition, Voice of the customer (VOC) and critical-to-quality (CTQ) parameters, Project charter development and stakeholder analysis.

UNIT II

Measure Phase: Process mapping and value stream analysis, Data collection methods and measurement system analysis (MSA), Establishing baseline performance and capability indices.

UNIT III

Analyze Phase: Statistical tools for data analysis (e.g., histograms, Pareto charts, scatter plots), Root cause analysis techniques (e.g., fishbone diagram, 5 Whys), Hypothesis testing and correlation analysis.

UNIT IV

Improve and Control Phase: Generating and prioritizing solutions for process improvement, Design of experiments (DOE) and factorial analysis, Piloting and validating improvement initiatives, implementing control mechanisms to sustain improvements, Statistical process control (SPC) charts and control plans, developing response plans for potential deviations.

Transaction Mode

Lectures, presentations, and interactive discussions on Six Sigma concepts and methodologies, Hands-on exercises and case studies to practice applying Six Sigma tools and techniques, Guest lectures by practitioners experienced in Six Sigma implementation, Group projects simulating real-world Six Sigma projects

13 Hours

15 Hours

14 Hours





Suggested Readings

1. Pyzdek, T., & Keller, P. A. (2014). Six Sigma Handbook, (ENHANCED EBOOK). McGraw Hill Professional.

2. Pande, P., Neuman, R., & Cavanagh, R. (2000). The Six Sigma Way, Chapter 4-Applying Six Sigma to Service and Manufacturing. McGraw Hill Professional.

3. George, M. L., & George, M. (2003). Lean six sigma for service (p. 273). New York: McGraw-Hill.

4. Antony, J., & Banuelas, R. (2002). Key ingredients for the effective implementation of Six Sigma program. Measuring business excellence, 6(4), 20-27.

5 Harry, M., & Schroeder, R. (2006). Six sigma: the breakthrough management strategy revolutionizing the world's top corporations. Crown Currency.

Course Title: Introduction to SAP	L	Т	Р	Cr.
Course Code: GSM208	2	0	0	02

Total Hours: 30

Learning Outcomes

Upon completing the course, students will be able to:

1. Understand the role of SAP in enterprise resource planning (ERP) systems.

2. Describe the key modules and functionalities of SAP software.

3. Navigate and utilize basic features of SAP user interfaces.

4. Perform basic transactions and processes in SAP modules such as SAP ECC (ERP Central Component) and SAP S/4HANA.

5. Analyze the benefits and challenges of implementing SAP in organizations.

Course Content

UNIT I

Introduction to Enterprise Resource Planning (ERP): Definition and importance of ERP systems, Overview of SAP's product portfolio and solutions, SAP architecture: client-server model and three-tier architecture, Overview of core SAP modules: FI (Financial Accounting), CO (Controlling), MM (Materials Management), SD (Sales and Distribution), etc., Introduction to industry-specific SAP solutions (e.g., SAP for Retail, SAP for Utilities)

UNIT II

7 Hours



SAP User Interfaces and Navigation: SAP GUI (Graphical User Interface) overview and installation, Navigation within SAP systems: menu paths, transaction codes, and favorites

Customizing SAP user interface settings for efficiency

UNIT III

7 Hours

Basic Transactions in SAP: Introduction to SAP ECC/SAP S/4HANA screens and layouts, Performing common transactions: creating purchase orders, posting journal entries, processing sales orders, etc., Understanding master data and transactional data in SAP

UNIT IV

8 Hours

SAP Implementation and Management: SAP project lifecycle: planning, implementation, and post-go-live support, Roles and responsibilities in SAP projects: project team, consultants, end-users

Best practices for successful SAP implementation and change management

Transaction Mode

Lectures, demonstrations, and hands-on workshops using SAP software, Practical exercises and workshops, Virtual or onsite visits to organizations using SAP systems

Suggested Readings

- 1. Parto, A. (2017). The Impact of Enterprise Resource Planning System on Iranian Firms Performance.
- 2. O'Leary, D. E. (2000). Enterprise Resource Planning Systems: Systems, Life Cycle, Electronic Commerce, and Risk. Cambridge University Press.
- 3. Chaudoir, S. (2009). Mastering SAP ERP HCM Organizational Management. Galileo Press.
- 4. Chang, C. M. (2016). Engineering Management: Meeting the Global Challenges. CRC Press.
- 5. Shtub, A., & Karni, R. (1999). Enterprise Resource Planning (ERP): The Dynamics of Operations Management. Kluwer Academic Publishers.

Course Title: Introduction to SAP (Lab) Course Code: GSM210

L	Т	Р	Cr.
0	0	2	01

Total Hours: 30

Learning Outcomes

Upon completing the course, students will be able to:

- 1. Gain practical experience in using SAP software for various business processes.
- 2. Navigate through SAP GUI and perform basic system configurations.
- 3. Execute common transactions in SAP ECC and SAP S/4HANA modules.
- 4. Develop problem-solving skills in a simulated SAP environment.

Course Content

UNIT I

SAP GUI and Navigation: Installation and overview of SAP GUI, Navigating through SAP menus and transaction codes, Customizing the SAP user interface for efficiency

UNIT II

Basic Transactions in SAP: Introduction to SAP ECC/SAP S/4HANA screens and layouts, Creating and managing master data, Performing transactions: purchase orders, journal entries, sales orders

UNIT III

Data Management in SAP: Understanding and managing master data and transactional data, Data migration and integration techniques, Practical exercises on data input and output in SAP

UNIT IV

SAP Implementation Simulation: Simulating SAP project lifecycle: from planning to post-go-live support, Roles and responsibilities in a simulated SAP project team, Implementing and managing changes in the SAP environment

Transaction Mode

Hands-on workshops and practical exercises using SAP software, Group activities and collaborative lab sessions, Case studies and real-world scenarios

Suggested Readings

- 1. Parto, A. (2017). The Impact of Enterprise Resource Planning System on Iranian Firms Performance.
- 2. O'Leary, D. E. (2000). Enterprise Resource Planning Systems: Systems, Life Cycle, Electronic Commerce, and Risk. Cambridge University Press.
- 3. Chaudoir, S. (2009). Mastering SAP ERP HCM Organizational Management. Galileo Press.
- 4. Chang, C. M. (2016). Engineering Management: Meeting the Global Challenges. CRC Press.
- 5. Shtub, A., & Karni, R. (1999). Enterprise Resource Planning (ERP): The Dynamics of Operations Management. Kluwer Academic Publishers.

7 Hours

7 Hours

8 Hours



Course Title: International Trade and Commerce	L	Т	Р	Cı
Course Code: GSM209	3	0	0	03

Total Hours: 45

Learning Outcomes

Upon completing the course, students will be able to:

1. Understand the fundamentals of international trade theories and policies.

2. Analyze the impact of globalization on international trade and commerce.

3. Identify the key players, institutions, and regulations governing international trade.

4. Evaluate the role of trade agreements and organizations in facilitating global commerce.

Course Content

UNIT I

Introduction to International Trade: Definition and significance of international trade, Comparative advantage and theories of international trade (e.g., Ricardian model, Heckscher-Ohlin model), Globalization and its impact on trade patterns and dynamics

UNIT II

International Trade Policies and Regulations: Tariffs, quotas, and non-tariff barriers to trade, World Trade Organization (WTO) and its role in promoting free trade, Regional trade agreements (e.g., NAFTA, EU) and their implications

UNIT III

International Trade Documentation and Procedures: Export-import documentation and compliance requirements, Customs procedures and trade facilitation measures, Incoterms (International Commercial Terms) and their application in international transactions

UNIT IV

Trade Finance and Risk Management: Methods of payment in international trade (e.g., letters of credit, documentary collections), Trade finance instruments (e.g., trade credit, export credit insurance), Managing currency risk and political risk in international business, Emerging Trends in International Trade, E-commerce and digital trade, Sustainable trade practices and corporate social responsibility (CSR), Geopolitical developments and their impact on global trade dynamics

Transaction Mode

14 Hours

14 Hours

15 Hours



Lectures, seminars, and interactive discussions on theoretical concepts and case studies

Suggested Readings

1. Carbaugh, R. J. (2019). International economics. Cengage Learning.

2. Hill, C. (2008). International business: Competing in the global market place. Strategic Direction, 24(9).

3. Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2019). International business: Environments and operations. Pearson.

4. Chowdhury, L. A. M., Rana, T., Akter, M., & Hoque, M. (2018). Impact of intellectual capital on financial performance: evidence from the Bangladeshi textile sector. Journal of Accounting & Organizational Change, 14(4), 429-454.

5. Singhania, M., Gupta, S., Chadha, G., Braune, E., Dana, L. P., & Idowu, S. O. (2023). Mapping 26 years of climate change research in finance and accounting: a systematic scientometric analysis. Environmental Science and Pollution Research, 30(35), 83153-83179.