BIJU PATNAIK UNIVERSITY OF TECHNOLOGY, ODISHA
ROURKELA

Curriculum and syllabus

MBA(Logistics& Supply Chain Management)
For the admission batch 2021-22

Scheme Of Credit Distribution
(As per the regular MBA syllabus of BPUT)

1. First Year:

i. 1st Semester 9 papers of 3 credits each =	27 credits
ii. 2nd Semester 9 papers of 3 credits each =	27 credits

2. Second Year

iii. 3rd Semester Specialization- 8 papers =	24 credits
iv. 4th semester Specialization – 6 papers =	18 credits
3. Internship during vacation after 2nd Semester =	4 credits
4. Seminar Presentation on any one elective in the 4th Semester =	2 Credits
TOTAL =	102 credits

Note:
Students those who have taken admission in MBA in "Logistic and Supply Chain Management", must have to take "Logistics and Supply Chain Management"," as one of the specialization and another specialization from the remaining groups .

FIRST YEAR

1ST SEMESTER

Sl. No.	Sub. Code	Name of the subjects	L-T-P	Credit	University Marks	Internal Evaluation
1	18MBA101	Managerial Economics	3-0-0	3	100	50
2	18MBA102	Marketing Management	3-0-0	3	100	50
3	18MBA103	Management Principles	3-0-0	3	100	50
4	18MBA104	Organizational Behaviour	3-0-0	3	100	50
5	18MBA105	Decision Science	3-0-0	3	100	50
6	18MBA106	Business Communication	3-0-0	3	100	50
7	18MBA107	Financial Accounting and Analysis	3-0-0	3	100	50
8	18MBA108	Business Law	3-0-0	3	100	50
9	18MBA109	Business Environment and Ethics	3-0-0	3	100	50
		TOTAL		**27**	**900**	**450**

2ND SEMESTER

Sl. No.	Sub. Code	Name of the subjects	L-T-P	Credit	University Marks	Internal Evaluation
1	18MBA201	Corporate Finance	3-0-0	3	100	50
2	18MBA202	Indian Financial System and Services	3-0-0	3	100	50
3	18MBA203	Human Resources Management	3-0-0	3	100	50
4	18MBA204	Business Research	3-0-0	3	100	50
5	18MBA205	Operations Management	3-0-0	3	100	50
6	18MBA206	International Business	3-0-0	3	100	50
7	18MBA207	Fundamentals of IT & ERP	3-0-0	3	100	50
8	18MBA208	Corporate Strategy	3-0-0	3	100	50
9	18MBA209	Entrepreneurship Development	3-0-0	3	100	50
		TOTAL		**27**	**900**	**450**

SECONDYEAR

K) FUNCTIONAL AREA: LOGISTICS AND SUPPLY CHAIN MANAGEMENT							
Sl. No	**Semester**	**Subject Code**	**Elective Papers**	**L-T-P**	**Credit**	**University Marks**	**Internal Evaluation**
1	3rd	18MBA301K	Logistics Management	3-0-0	3	100	50
2	3rd	18MBA302K	International Logistics	3-0-0	3	100	50
3	3rd	18MBA303K	Retail Supply Chain Management	3-0-0	3	100	50
4	3rd	18MBA304K	Procurement, Storage, and Warehouse Management	3-0-0	3	100	50
5	4th	18MBA401K	Logistics for Port Management	3-0-0	3	100	50
6	4th	18MBA402K	Material Handling in Logistics	3-0-0	3	100	50
7	4th	18MBA403K	Green Supply Chain Management	3-0-0	3	100	50
			TOTAL		**21**	**700**	**350**

Compulsory Subjects:

Sl. No.	**Semester**	**Sub. Code**	**Name of Subject**	**L-T-P**	**Credit**	**University Marks**	**Internal Evaluation**
1	3rd	**18MBA305**	Internship *	0-0-2	4	-	100
2	4th	**18MBA404**	Seminar Presentation *	0-0-1	2	-	100

*Detail syllabus of the 1st year is same as the syllabus of the MBA programme of BPUT.

SECONDYEAR

3rd semester	**21MBA301K**	**Logistics Management**	**L-T-P**	**3 credits**	**35 Hours**
			3-0-0		

Course Objectives

- To analyse the supply chain scenario and to make understand the student's insights on the supply chain process from sourcing to distribution.
- To understand the role of logistics in the business operations.
- To enhance the supply chain integration and sustainable supply chain strategic skills among the students.

Module I:

Logistics and Supply Chain Management - Definition, Evolution, Importance of logistics management. The concepts of logistics and Supply Chain Management, Key Drivers of Supply Chain Management, Logistics relationships**.**

Basics of Transportation: Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; International Air Cargo Transport; Coastal and Ocean transportation, Characteristics of shipping transport, Types of Ships.

Module II:

Containerization: Genesis, Concept, Classification, Benefits, and Constraints of Containerization; Inland Container Depot (ICD): Roles and Functions of ICD, CFS, Export Import Clearance at ICD; Container Corporation of India-CONCOR; ICDs under CONCOR;

Packing and Packaging: Meaning, Functions and Essentials of Packing and Packaging, Packing for Storage, Overseas Shipment, InlandTransportation, Product content Protection, Packaging Types: Primary, Secondary and Tertiary, Requirements of Consumer Packaging, Channel Member Packaging and Transport Packaging, Shrink packaging, Identification codes, Bar codes, and Electronic data interchange (EDI) in Packaging, Universal Product Code, GS1 Standards, Package labels, Symbols used on packages and labels.

Module III:

Special Aspects of Export Logistics: Picking, Packing, Vessel Booking [Less-than Container Load(LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centres-Distributors,Retailoutlets, Import Logistics: Documents Collection, Valuing, Bonded Warehousing, Customs Formalities, Clearing,Distribution to Units.

Books:

1.Bowersox, Closs, Cooper, Supply Chain Logistics Management, McGraw Hill.

2. Burt, Dobbler, Starling, World Class Supply Management, TMH.

3. Donald J Bowersox, David J Closs, Logistical Management, TMH

3rd semester	21MBA302K	International Logistics	L-T-P 3-0-0	3 credits	35 Hours

Course Objective:

• To explain the movement of cargo from the vendor to end-user across the globe.

• Exposure to different mode of international transportation.

• To add value that includes improved quality and product accessibility across the world at optimal cost.

MODULE-I

Meaning and significance of international transportation, Role of transportation in the integrated logistics process, Basic principles of international transportation, Parties involved in international transportation, Significance of Transportation, Modes of International Transportation: Criteria for Selection of different modes of transportation, Multi-Modal Transportation. Freight costing and pricing, Classification of Costs associated with Transportation process, Cost Strategies, Factors affecting Transportation cost.

Sea Mode Transportation:Features, Types of transportation, and Terminology associated with SMT. Advantages and Disadvantages of using Sea mode transportation, Shipping Methods,Major Sea-routes around the world.

MODULE-II

Air Transportation: Features, Types of Air Transportation, and Terminology associated with Air transportation, Advantages and Constraints of Air transportation, Types of Carriers, Air Cargo chain operators, Legal Aspect of Air transportation, Freight Structure: Air Cargo Tariff Structure, Air Freight Classification, Air Freight Calculation, Factors Affecting Air Freight cost, Air Freight Consolidation, Role of IATA and TIACA in Air Cargo Industry.International Road Transportation: International Road Network, Transportation by Rail and Road, Advantages and Constraints of International Road Transport, Pipeline as a Mode of Transportation and Concept of Multi-modalism.

MODULE-III

Export and Import Procedure in India, Transport Documents: Mate Receipt, Bill of Lading, Air-way Bill, Lorry Receipt, Packaging and Labelling for Exports: Definition and Functions of Packaging, Labelling the export packages, Packaging for different modes of transportation, Rail Receipt.

Books:

1. Ewan Roy, Global supply chain management, Trade Ready.

2. Altekar, Supply chain management, and concepts, PHI.

3. R.B. Handfield and E.L. Nochols, Jr. Introduction to Supply Chain Management. Prentice-Hall.

4. Sunil Chopra and Peter Meindel. Supply Chain Management: Strategy, Planning, and Operation, PHI

3rd semester	21MBA303K	Retail Supply Chain Management	L-T-P	3 credits	35 Hours
			3-0-0		

Course Objective:

- To analyse the retail supply chain scenario and to make understand the students the insights on retail supply chain process from sourcing to distribution.
- To enhance the retail supply chain integration and sustainable supply chain strategic skills among the students.

MODULE- I

Retail Supply chain: Definition, characteristics of retail supply chain,Challenges faced in retail supply chain.Retail as a business,Importance of customer segments RSCM,Value chain, Types or retail chain business,Comparative advantages of Retail chain Business, CSR in retail industry.

Retail supply chain environment: Drivers of retail supply chain change, Globalization concept of retail supply chain,Nature of demand,Quality function deployment, Retail supply chain risk, Retail supply chain metrics.

MODULE-II

Retail strategy and Supply chains: Product life cycle,Innovative and functional products,Retail market segments, Supply chain management excellence,Skill requirements. Retail supply chain process improvement: improvement approaches: PDCA, DMAIC, CPFR,Supply chain collaboration,Core competency, Demand-driven supply chain: tools and techniques,Product tracking: Barcoding, RFID.

MODULE-III

Supplier Relationship Management and Sourcing Decisions. Pricing Dynamics and Dynamic Pricing in Supply Chain. Customer Relationship Management Process. Inventory Management. Communication and Inter-Functional Coordination. Finance and retail supply chain: Supply chain costs, Root causes for cost, Retail returns, Opportunities in retail returns.

References:

1) Swapna Pradhan – Retailing Management, TMH
2) J. Lamba – The Art of Retailing, McGraw Hill Education
3) Barry Berman, Joel R Evans – Retail Management; A Strategic Approach, Pearson India
4) James B Ayers, Mary Ann Odegaard – retail Supply Chain Management, Auerbach Publications
5) Dravid Gilbert – Retail Marketing. Pearson India
6) Ray (2010). Supply Chain Management for Retail, Tata McGraw-Hill

3rd semester	21MBA304K	Procurement, Storage, and Warehouse Management	L-T-P	3 credits	35 Hours
			3-0-0		

Course Objectives:

- Provides know-how required to operate an efficient and cost-effective warehouse as also the role of inventory in warehouse management.
- It provides guidance on using the latest technology, reducing inventory, people management, location and design and manage uncertainty risks of customer markets.
- Define the right structure of the supply network and inventory control and warehouse management system.

Module-I

Procurement System, Principles of Procurement, History of procurement function: from administrative to strategic, value-added role, Procurement Cycle, Procurement Planning, Purchasing Mix: Six Rights, Selecting the right supplier, Source of information and process, Supplier appraisal/vendor capability, Bidding process.

Module-II

Warehousing: Concepts, Role of warehouse, Types of warehouses, warehouse location, Need for warehousing, Supply chain trends affecting warehouse, Warehouse functions, Role of warehouse manager, Warehouse process: e-commerce warehouse, Receiving and put away, Warehouse process, Pick up preparation, Receiving, Pre-receipt, In- handling, Preparation, Offloading, Checking, Cross-docking, Quality control. Pick area layout, Picking strategies and equipment, Order picking methods, Warehouse processes, Replenishment to dispatch, Value adding services, Indirect activities: Stock management, Stock or Inventory counting, Perpetual inventory counts, Security,Returns processing, Dispatch.

Module-III

Storage Management system: Storage Inventory Management, Functions of storage & Inventory, Classification of Inventory, Methods of Controlling Stock Levels, Always Better Control (ABC) Inventory system, Warehouse Management Systems (WMS): Choosing a WMS, the process implementation, Cloud computing, Warehouse Layout: Data collection, space calculation, aisle width, finding additional space.Storage and Warehousing Information system, Storage Equipment,Storage option, Shuttle technology, very high bay warehouse, Warehouse handling equipment, Vertical and horizontal movement, Automated Storage/ Retrieval System (AS/RS), Resourcing a warehouse, Warehouse costs, Types of cost, Return on Investment (ROI), Performance management- outsourcing decisions.

Books:

1. Gwynne Richards, Warehouse Management: A Complete Guide to Improve Efficiency and Minimizing Cost in the Modern Warehouse. The Chartered Institute of Logistics and Transport, Kegan page limited.
2. David E. Mulchy & Joachim Sidon, A Supply Chain Logistics Program for Warehouse Management. Auerbachian Publications
3. World-Class Warehousing and Material Handling. (International ed.), McGraw-Hill.
4. Muller, M.Essentials of Inventory Management, American Management Association.

4th semester	21MBA401K	Logistics for Port Management	L-T-P	3 credits	35 Hours
			3-0-0		

Course Objectives:

- To be familiar with working in Ports and Airports.
- To understand the operating procedures of logistics at Port and Airport.
- To be familiar with norms of logistics at port and airport.
- To be aware of the development of facilities at the port in the era of globalization.
- To be able to analyse the performance of standard operating procedures at port and airport for cargo.

Module-I

Port Management: Port Structure, Functions, Definition, Types of port, Layout of the Ports; Organisational Structure, Fundamental observations, Main functions and features of the port: Infrastructure and connectivity: Administrative functions, Operational functions; Main services of the port: Services and facilities for ships, Administrative formalities, Cargo transfer, Cargo facilities, Services for cargo,Value - added service, Ports and their stakeholders like PHO, Immigration, Ship agents, Stevedores, CHA.

Module-II

Port Operations: Berths and Terminals, Berth Facilities and Equipment, Ship Operation: Pre-shipment planning, Stowage plan, Onboard stowage, Cargo positioning and stowage on the terminal, Developments in cargo/container handling and terminal operation, Safety in cargo operations, Cargo security: Measuring and evaluating performance and productivity. **Port Development:** Phases of port development, Growth in world trade, Changes in growth, Development in terminal operation. Shipping technology and port: Ship knowledgedevelopment and port development, Port time and ship speed, Other technical development affecting port.

Module-III

Port Administration: Ownership and Management, Port ownership structure, Types of port ownership and administration, Organizations concerns, Boards governing the ports, Port management development, Rise and fall of Ports, Information technology in ports. Port ownership in Indian context: Acts governing the Ports in India, Port ownership structure in India. Port reform: Framework for port reform, Evolution of ports in a competitive world, Alternative Port Management Structure and Ownership Models.

Books:

1. N.v Suresh, D. Rajesh, V.Suganya, Logistic and air cargo management , iterative international publisher, iip
2. Patrick M.Alderton., Port Management and Operations. Information Law Category, U.K.

Reference Books:

3. Maria G.Burns., Port Management and Operations. CRS Press, U.K.
4. Alan E.Branch., Elements of Shipping. Chapman and Hall, Fair-play Publications, U.K.
5. De Moni, Measuring and Evaluating Port Performance and Productivity. UNCTAD, New York.

4th semester	21MBA402K	Material Handling in Logistics	L-T-P	3 credits	35 Hours
			3-0-0		

Course objective:

- To determine appropriate distance to be covered in logistics.
- To Facilitate the reduction in material damage as to improve quality.
- To know how to reduce overall manufacturing time by designing efficient material movement.

MODULE-I

Materials Handling: Need of Materials Handling, Importance of Materials Handling, Advantages and Disadvantages of Materials Handling, Functions involved in Material Handling, Types of Layout & Performance of Layout.

MODULE-II

Principles of Materials Handling: Preliminary Considerations, Principles of Material Handling Equipment, Factors in Selection of Material Handling Equipment, Materials Handling and Role of Management.

Selection of Materials Handling Equipment: Economics of Material Handling Equipment, Cost Considerations, Cost Analysis, Cost Account and Material Handling, Cost Indices.

MODULE-III

Hoisting Machinery: Elevating Equipment, Cranes: Important Parts of cranes, Types of cranes, Rotatory or Revolving Cranes, Bridge & Mobile Cranes.

Conveying Equipment: Traction Type Conveyors, Traction less Conveyors, Surface Tension Equipment, Narrow gauge equipment, Cross Holding Equipment, ODC Material Handling.

Books:

1. R.B.Choudary&G.R.N.Tagore, Plant Layout, and Material Handling, Khanna Publishers.
2. Jacob Fruchtbaum, Bulk Materials Handling Hand Book, CBS Publishers & Distributors.
3. Dr.K.C.Arora, Vikas V.Shinde, Aspects of Material Handling, Laxmi Publications (p) Ltd.

4th semester	21MBA403K	Green Supply Chain Management	L-T-P 3-0-0	3 credits	35 Hours

Course Objective:

- To provide foundational knowledge associated with the green supply chain.
- To teach the implication of today's most pressing environmental issues
- To describe how the various green supply chain practices can actually save money, increase efficiency and reduce delivery time.

MODULE-I

Traditional Supply Chain and Green Supply Chain, Environmental Concern Supply Chain, Closed-loop Supply Chain, Corporate Environmental Management. Green Supply Chain Management (GSCM): Definition, Basic Concepts, GSCM Practices.

MODULE-II

Design for the Environment (DFE) or Eco-Design, EcoDesign and Supplier Relationships: Definitions of Eco-Design, Tools of Eco-Design Product, Involving suppliers in eco-design product: Drivers of eco-design product, Challenges in eco-design product, Successful factors of eco-design product.

Green Procurement and Purchasing: Definitions of green purchasing, Drivers of green purchasing, Greenpurchasing strategies, Green purchasing performance measurement, Green Supplier Development and Collaboration.

MODULE-III

Green Manufacturing or Production: Evolution, Definitions, 4Re's: recycling, remanufacturing, reuse and reduction, Closed-loop Manufacturing, ISO 14000 systems, Life Cycle Analysis (LCA), Lean Management for Green Manufacturing or Production.

Green Logistics and Transportation: Definitions of Green Logistics, Critical drivers of Green Logistics, Green transportation and logistics practices, Environmental impacts of transportation and logistics, Closing the Loop: Reverse Logistics.

Books:

1. Joseph Sarkis, Yijie Dou. Green Supply Chain Management: A Concise Introduction, Routledge.
2. CharisiosAchillas, Dionysis D. Bochtis, Dimitrios Aidonis, Dimitris Folinas. Green Supply Chain Management, Routledge,.
3. Hsiao-Fan Wang, Surendra M. Gupta. Green Supply Chain Management: Product Life Cycle Approach, McGraw Hill publishing,
4. Stuart Emmett, Vivek Sood. Green Supply Chains: An Action Manifes by Stuart Emmett, Wiley publications,.