

**MASTER OF SCIENCE IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT  
CURRICULUM PLAN SY2023-2024**

**FIRST TRIMESTER**

Course Code	Course Title	Units
PM911	Principle of Logistics and supply chain Management	3
PM912	Supply Chain Risk Management	3
PM913	Green and Sustainable Logistics	3
PM914	Introduction to Big Data for supply chain management	3
<b>Total Units</b>		<b>12</b>

**SECOND TRIMESTER**

Course Code	Course Title	Units
PM921	Supply Chain Strategy and Design	3
PM922	Big Data Analytics	3
PM923	Freight Transport Warehouse Management	3
RES911	Research Methods for Business	3
<b>Total Units</b>		<b>12</b>

**THIRD TRIMESTER**

Course Code	Course Title	Units
PME931	Elective 1	3
PME932	Elective 2	3
<b>Total Units</b>		<b>6</b>

**FOURTH TRIMESTER**

Course Code	Course Title	Units
PM999	Thesis Writing	6
<b>Total Units</b>		<b>6</b>

**TOTAL UNITS: 36**

**Note: MKT999 Thesis Writing Course will require a minimum of two trimesters to complete.**

**Elective Courses: (Students are expected to choose any 2 courses from the Electives offered)**

Course Code	Course Title	Units
PM931	Strategic Supply Chain and Artificial intelligence	3
PM932	Logistics Cyber Security Compliance	3
PM933	Supply Chain Modeling and Analytics Techniques	3
PM934	Project Management	3
PM935	Retail Logistics and Supply Chain Management	3
PM936	Ethics and Sustainability	3

**MASTER OF SCIENCE IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT  
CURRICULUM PLAN EFFECTIVE 2023-2024**

**COURSE DESCRIPTION**

Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
PM911	Principle of Logistics and supply chain Management	3	0	3
This course explores the Introduction to the field of logistics and supply chain management. Includes development of logistics systems, careers in logistics, distribution planning, supply chain security, and customer service. Also includes roles and functions of purchasing, inventory control, physical distribution, warehousing, transportation methods, packaging, and customs.				
Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
PM912	Supply Chain Risk Management	3	0	3
This course aims to give you an in-depth understanding of the fundamental principles of contemporary supply chain sustainability, resilience, and risk within a business context. This course provides a better understanding of key logistics and supply chain challenges and issues, with a focus on social, economic, and environmental considerations and environmental policies. It will help to understand how key stakeholders operate, regulate, decide, and function in the real world. It will identify priorities, reflect, and conceptualize green supply chain management / sustainable supply chain management together with risk and risk-resilience concepts in the context of business continuity against the key priorities of environment, economy, safety, public health, social inclusion, accessibility and integration.				
Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
PM913	Green Logistics Management	3	0	3
This course deals with environmental logistics and refers to sustainable policies and measures focusing on lowering the impact logistics has on the environment. This includes the configuration of processes, structures, systems, and equipment used in the transportation, distribution, and warehousing of goods. Despite logistics not being known for a high level of sustainability as an industry, green logistics aim to gauge the carbon footprint of logistics operations, lower air, soil, sound, and water pollution, and use raw materials sensibly.				
Course Code	Course Title	Lec Hrs	Lab Hrs	Units
PM914	Introduction To Big Data For Supply Chain Management	3	0	3
This course is designed to explain the big data in logistics and the topics include collection, processing, and analysis of complex datasets related to logistics management operations. Further topics like use sensors, GPS devices, RFID tags, and enterprise resource planning (ERP) systems, data-driven business model and big data supply chain analytics will be taught. The course will help students to gain knowledge in areas such as monitoring of inventory levels, track shipments, identify potential disruptions, supply chain agility and responsiveness, predict equipment failures and maintenance needs, reduce downtime, increase equipment utilization, and extend the lifespan of assets.				
Course Code	Course Title	Lec Hrs	Lab Hrs	Units
PM921	Supply Chain Strategy and Design	3	0	3
This course delivers advanced knowledge of the strategy and design of supply chains. IT will discuss global case studies and learn how to apply supply chain design principles and explore approaches to supplier relationship management, procurement and customer service strategies.				
Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
PM922	Big Data Analytics	3	0	3

This course aims at providing students with the new possibilities opened by the digital revolution and how these can be translated into the field of logistics and supply chain management. You will be exposed to several data analytic techniques, including data cleaning, data visualization, and dashboard development (using software) with a focus on application to global logistics and sustainability. More specifically the module will cover aspects such as, using Data Analytics in understanding the big data landscape; Data Processing; Data Visualization: telling a story; Analytical Tools: Descriptive, Predictive, Prescriptive and Cognitive; and Simulation/Network Analysis.

Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
PM923	Freight Transport Warehouse Management	3	0	3

This course examines the activities, resources and processes used in freight transport and warehousing including the foundations of multi-modal freight (road, rail, airfreight, sea-freight, pipeline); the change from warehouse (storage) to a distribution center and value adding activities; foundations of warehouse management (storage systems, handling systems, order picking systems, equipment choices and selection); and freight and distribution center interface and implications. In addition, the course will focus on issues related to maritime modal of transportation.

Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
RES911	Research Methods For Business	3	0	3

This course equips students with the skills to develop and undertake a research dissertation. It provides the theoretical and practical preparation for business research. The course covers the necessary skills and requirements for a literature review, qualitative and quantitative methods, and a research proposal in addition to the pragmatics of ethics and project management. Peer review, skill development workshops and practice exercises are the key learning strategies.

Course Code	Course Title	Lec Hrs	Lab Hrs	Units
PM999	Thesis Writing	6	0	6

The thesis writing is the culmination of the Masters' programme. Much of the learning on the course takes place as students need to complete a thesis / dissertation or negotiate either a project (consultancy project or creative project) addressing a defined business problem. All the options provided above require students to review the literature and to design and carry out primary research to gain insights into the problem prior to defining and developing the solution. This flexible approach to assessment is intended to provide a range of options, reflecting students' diverse strengths and educational backgrounds.

Course Code	Course Title	Lec Hrs	Lab Hrs	Units
PM931	Strategic Supply Chain and Artificial Intelligence	3	0	3

This course will provide the students with the prevalent techniques of Artificial Intelligence (AI) that are applied in logistics and supply chain management (SCM). Further the course will cover topics on the use of AI to formulate strategies in SCM and help students to know the use of potential AI techniques that can be employed in SCM. The course also will deal on how disruptive technologies such as Artificial Intelligence (AI), blockchain and the Internet of Things (IoT), might affect the logistics sector and transform supply chains in the future.

Course Code	Course Title	Lec Hrs	Lab Hrs	Units
PM932	Logistics Cybersecurity Compliance	3	0	3

This course is designed to provide critical understanding of the current cyber security and data protection of logistics and supply chain. It will identify Introduction to cyber security and data protection fundamentals, Understanding the risks and impacts of threats, Key cyber security challenges in the logistics industry with case studies, Strategies for protecting business continuity and adopting solutions

Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
PM933	Supply Chain Modelling and Analytics techniques	3	0	3

The course is designed in two parts. **Supply chain modelling:** This part aims to formulate key activities of the supply chain while emphasizing both the need for formulation and implementation. These include Networks and Routing Transportation models, Resource Allocation and Production Scheduling models, Inventory management models, Quality control models, and Project Management. **Analytics Techniques:** This part demonstrate how analytics techniques, such as Forecasting, Regression, Descriptive analytics, Probability and Decision Analysis and Optimization, can be applied to improve supply chains' efficiency and effectiveness by enabling data-driven decisions at strategic, operational and tactical levels.

Course Code	Course Title	Lec Hrs.	Lab Hrs	Units
PM934	Project Management	3	0	3

This course will provide details on the role of a project and project manager in logistics, supply chain and operations management, and the concepts and techniques required to manage the core aspects of a project. The main topics covered include fundamental theories, knowledge, and techniques required to manage projects in a contemporary logistics, supply chain and operational setting. Drawing on contemporary project management research and business case studies on logistics, supply chain and operations, this course will develop your knowledge, skills, and confidence in managing projects in a global logistics and supply chain environment.

Course Code	Course Title	Lec Hrs	Lab Hrs	Units
PM935	Retail Logistics and Supply Chain Management	3	0	3

This course aims to give you an in-depth knowledge about retail organizations using SCM to control inventory levels, product quality, expenses, and timing. The course covers supply chain strategy that differentiates delivery terms and service offerings which are vital for optimizing the customer service and balance of cost with a focus on retail logistics and supply chain management.

Course Code	Course Title	Lec Hrs	Lab Hrs	Units
PM936	Ethics and sustainability	3	0	3

This course deals with immediate and long-term needs for sustainability in the economy, society, and environment. Business professionals who complete this course will have the necessary skills to manage and lead organizations more sustainably and ethically. The course will include ethical leadership, stakeholder management, professional ethics, and corporate social and environmental responsibility.