

# Certificate/Diploma/BSc (Hons) Logistics Management (Part-Time) – LCLM 405

## 1. Objectives

This Programme is intended for persons who are already working in the transport, textile, hotels and other related industries. In particular, this programme will examine the concepts and principles of Logistics and how they are applied to organisations. Since Globalisation and the emergence of new technologies, the movement of products, services and information have increased dramatically over the years. Companies can procure and sell their goods and services worldwide. However, the transfer of goods/services from its point of production to its point of consumption needs careful coordination to ensure customer satisfaction. As such, logistics management is important to ensure effective flow of resources through the integration of issues related to transportation, material handling, inventory, warehousing and information. Students will be able to enhance their skills in logical thinking, problem solving and project management. In particular, the students will pursue careers in specific sectors/segments of land, sea and air transport industries as well as in other types of businesses. Possible careers range from port administrators, air cargo handling officers, IT systems analysts, supply chain managers, logistics analysts, transport planners, warehouse managers, distribution managers to purchasing executives amongst others.

## 2. General Entry Requirements

In accordance with General Entry Requirements for admission to the University for Undergraduate Degrees.

## 3. Programme Requirements

Credit in Mathematics at 'O' level.  
(Suitable candidates may be called for an interview)

### For Certificate/Diploma/BSc

In line with the University policy on access to programmes, students without the formal entrance qualifications set out above will be considered on the basis of work experience (three years minimum). Each case will be considered on its own merits.

### For BSc (Upgrade)

Student should be a holder of a Diploma in Logistics Management or any other equivalent and suitable qualification(s) acceptable by the University of Mauritius.

## 4. Programme Duration

	Normal (Years)	Maximum (Years)
Certificate (Part-Time)	1	3
Diploma (Part-Time)	2	4
BSc (Part-Time)	4	7
BSc (Part-Time – Upgrading)	2	4

## 5. Credits per Semester

Minimum 9, Maximum 24 subject to Regulation 4.

## 6. Minimum Credits Required for Award of

Certificate: 30  
Diploma: 60  
Degree: 102

**Note: Certificate/Diploma will be delivered on EXIT of Programme, after having completed the above number of credits.**

Credits are as follows:

## 7. Assessment

Each module will carry 100 marks and will be assessed as follows (unless otherwise specified):

Assessment will be based on a written examination of normally 2-hour duration as specified and continuous assessment carrying a range of 20% to 30% of total marks.

Continuous assessment may be based on mini-projects, assignments, and one class test.

For a student to pass a module, an overall total of 40% for combined Continuous Assessment and Written Examination components would be required without minimum thresholds within the individual continuous assessment and written examination. There shall be at least one class test.

Semester	Core	Electives	Mini-Project	Total
1	15			15
2	15			15
3	15			15
4	15			15
5	12			12
6	12			12
7	6	3		9
8	6		3	9
<b>TOTAL</b>	<b>96</b>	<b>3</b>	<b>3</b>	<b>102</b>

The mini-project will carry 3 credits. The topic must reflect the Programme of study being attempted.

Submission deadline for final copy of mini-project: to be finalised 3 months after final exams (level 4 Semester 2). Date to be finalised.

### **NOTE FOR LLC 2211(3): SIMULATION OF SYSTEMS**

Students will be expected to attend seminar and complete the assignment for this seminar-based 15-hour module. Students will have the opportunity to use real data from their

professional background in order to develop a simulation model and test different scenarios and will have to successfully complete the module.

**8. Programme Plan – Certificate /Diploma/ BSc (Hons) Logistics Management (Part-time)**

**SEMESTER 1**

<b>Module Code</b>	<b>Module Name</b>	<b>Hrs/Wk L+P</b>	<b>Credits</b>
<b>CORE</b>			
LLC 1101(1)	Principles of Financial Accounting for Logistics	3+0	3
MGT 1111(1)	Organisation and Management	DE	3
LLC 1103(1)	Business Statistics	3+0	3
LLC 1104(1)	Introduction to Law	3+0	3
LLC 1105(1)	Information Technology for Logistics 1	3+0	3

**SEMESTER 2**

<b>Module Code</b>	<b>Module Name</b>	<b>Hrs/Wk L+P</b>	<b>Credits</b>
<b>CORE</b>			
MGT 1200(1)	Introduction to Marketing	DE	3
LLC 1207(1)	Fundamentals of Transportation Law	3+0	3
LLC 1208(1)	Introduction to Logistics	3+0	3
LLC 1209(1)	Introduction to Transport Operations and Planning	3+0	3
LLC 1210(1)	Effective Negotiating Skills	3+0	3

**EXIT WITH CERTIFICATE**

**SEMESTER 3**

<b>Module Code</b>	<b>Module Name</b>	<b>Hrs/Wk L+P</b>	<b>Credits</b>
<b>CORE</b>			
CDL 3010(3)	Marketing Management	DE	3
LLC 2102(3)	Production and Operation Management	3+0	3
LLC 2103(3)	Retail Logistics	3+0	3
LLC 2104(3)	Management Accounting for Logistics	3+0	3
MGT 2101(3)	Human Resource Management	DE	3

**SEMESTER 4**

<b>Module Code</b>	<b>Module Name</b>	<b>Hrs/Wk L+P</b>	<b>Credits</b>
<b>CORE</b>			
LLC 2206(3)	Supply Chain and Logistic Management	3+0	3
LLC 2207(3)	Purchasing and Procurement Logistics	3+0	3
LLC 2208(3)	Operation Research	3+0	3
LLC 2209(3)	Information Technology for Logistics 2	3+0	3
LLC 2210(3)	Distribution and Warehouse Management	3+0	3
LLC 2211(3)	Simulation of Systems (SEMINAR)		

**EXIT WITH DIPLOMA**

**SEMESTER 5**

Module Code	Module Name	Hrs/Wk L+P	Credits
<b>CORE</b>			
LLC 3101(5)	Quality Systems for Logistics	3+0	3
LLC 3102(5)	Ports Operations and Shipping Administration	3+0	3
LLC 3103(5)	Hotel Operations Management	3+0	3
LLC 3104(5)	Airline Management	3+0	3

**SEMESTER 6**

Module Code	Module Name	Hrs/Wk L+P	Credits
<b>CORE</b>			
LLC 3201(5)	Strategic Management	3+0	3
LLC 3202(5)	International Business Management	3+0	3
LLC 3203(5)	International Business Law	3+0	3
LLC 3204(5)	Intercultural Business Communication and Negotiations	3+0	3

**SEMESTER 7**

Module Code	Module Name	Hrs/Wk L+P	Credits
<b>CORE</b>			
LLC 4101(5)	Project Management	3+0	3
LLC 4102(5)	Logistics Strategy	3+0	3
LLC 4103(5)	Business Research Methods (Note 1)	3+0	0
<b>Electives</b>	<b>Choose One From:</b>		
LLC 4104(5)	Event Management	3+0	3
LLC 4105(5)	Risk Management and Safety	3+0	3
LLC 4106(5)	Green Logistics and Environmental Management	3+0	3

**SEMESTER 8**

Module Code	Module Name	Hrs/Wk L+P	Credits
<b>CORE</b>			
LLC 4201(5)	Mini-Project		3
LLC 4202(5)	International Logistics	3+0	3
LLC 4203(5)	Supply Chain Modelling	3+0	3

Total Number of Core Modules: 34

As Follows:

Semester	Core	Electives
1	5	
2	5	
3	5	
4	5	
5	4	
6	4	
7	3	3 (Choose one)
8	3	
<b>Total</b>	<b>34</b>	<b>3</b>

Note 1: Business Research Methods will be offered in Semester 7. This module is designed to enable students to develop the appropriate skills for the preparation of their mini project. It is non-examinable and no credit is awarded for it, but it must be satisfactorily completed (Grade S) for the award of the Degree.

## **9. Outline Syllabus**

### **LLC 1101(1) - PRINCIPLES OF FINANCIAL ACCOUNTING FOR LOGISTICS**

The Role of Accounting Information; Recording and Summarising Transactions; Accounting Concepts & Preparing Final Accounts; Adjustments to Final Accounts; Capital v/s Revenue Expenditure; Bank Reconciliation Statement; Stock Valuation Methods; Partnerships; Goodwill and Changes in Partnerships; Incomplete Records, Introduction to Company Accounts, Cost Accounting and Cost Classifications; Manufacturing Accounts; Introduction to Accounting Ratios and Interpretation of Accounts.

### **MGT 1111(1) - ORGANISATION & MANAGEMENT**

Management Concepts and Functions. Development of Management Theories. The Internal and External Environments of the Organisation. Social Responsibility and Ethics in Management. Managerial Decision Making. The Planning Process. The Nature of Organisation Structure. Organisational Control. Contemporary issues in Management. Management in Future.

### **LLC 1103(1) - BUSINESS STATISTICS**

The nature and main sources of business statistics. Problems of definition and collection. Business applications of sampling. Sampling methods, sampling and non-sampling errors. Organising and presenting business data. Elementary business data analysis: central tendency, dispersion, skewness. Index numbers: price index and volume index. Time series analysis for business data: decomposition method, exponential smoothing and forecasting. Simple linear regression. Uncertainty in the business environment. Elementary probability theory and its applications.

### **LLC 1104(1) - INTRODUCTION TO LAW**

Introduction to Law & Legal Method; Contract; Sale of goods and supply of Services; Agency; Negotiable Instruments and Banking; Insurance; Labour Law; Alternative Dispute Resolution; Statutory interpretation. Droits subjectifs and legal personality; The Judicial Process.

### **LLC 1105(1) - INFORMATION TECHNOLOGY FOR LOGISTICS 1**

Introduction to Computers; Hardware and Software. Input, Output and Storage; Organisation of Data; Systems Analysis and Design; Data Communications; Impact of Computers on Society; Future of Computing.

### **MGT 1200(1) - INTRODUCTION TO MARKETING**

Understanding marketing, The Marketing Environment, Information Systems & Marketing Research, Customer Buying Behaviour, Segmentation, Target Marketing & Positioning, The Marketing Mix: Product, Price, Place, Promotion. Strategic Planning.

### **LLC 1207(1) - FUNDAMENTALS OF TRANSPORTATION LAW**

Statutory birth and history of transportation regulation; administrative/interpretive agencies; recent statutes affecting modal regulation; Modal Regulation: Airlines Industry; Motor Carrier Industry & Water Carrier Industry; international law, logistics and policy.

### **LLC 1208(1) - INTRODUCTION TO LOGISTICS**

Concepts of Logistics: Integrated logistics and supply chain, customer service and logistics; Planning framework for logistics; Logistics Network Planning; Logistic management and organization; Materials Management; Inventory Planning and Management; Principles of Warehousing; Cost and Performance Monitoring; International logistics.

**LLC 1209(1) - INTRODUCTION TO TRANSPORT OPERATIONS AND PLANNING**

Functions of Transport; Types of primary vehicles and equipment used: ships, trucks, train, and aircraft; types of operators involved in multimodal transportation; type of service structure; nature of price competition between transport modes; Introduction to the transport planning process; Evaluation in planning and transport; Transport and the sustainable environment; Transport Networks: Features of networks – nodes and links, Multi - modalism and choice in transport, Supply chain, Inter - modalism, Transport Infrastructure.

**LLC 1210(1) - EFFECTIVE NEGOTIATING SKILLS**

Art of negotiating. Types of negotiation. Preparing for a negotiation. Bargaining and making concessions. Managing conflicts. Telephoning and Secretarial barrier. Presentation techniques culture and negotiating skills. Using visual aids. Cross-Cultural understanding, culture and negotiation. Making meetings effective.

**CDL 3010(3) - MARKETING MANAGEMENT**

Development of the four P's in marketing, i.e. Product, Price, Place and Promotion. Product Planning, Diffusion of Innovation and the Product Life Cycle; Pricing considerations and pricing methods. The Promotional Mix: personal selling, advertising, sales promotion. Public Relations and the emergence of direct marketing. Distribution Strategies: channel intermediaries and channel decisions. Customer Relationship Management. Formulating and Evaluating a Marketing Plan.

**LLC 2102(3) - PRODUCTION AND OPERATION MANAGEMENT**

Introduction to Operations Management. Types and characteristics of manufacturing and service systems. Operations Strategy in the Global Environment, Operations and Productivity, Forecasting Models, Design of Goods and Services, Process Strategy, Capacity Planning, Location Strategy, Layout Strategy, Inventory Management, MRP I, MRPII, ERP Systems, Lean Management Logistics.

**LLC 2103(3) - RETAIL LOGISTICS**

Retail Logistics: Changes and Challenges; Supply chain transformation and Retail Logistics; Buyer-Seller Relationships; Internationalisation of the retail supply chain; Market Orientation and Supply Chain Management; Food Logistics; Environmental impact of online retail logistics; Managing waste within the retail supply chain.

**LLC 2104(3) - MANAGEMENT ACCOUNTING FOR LOGISTICS**

Introduction to Management Accounting; Accounting for Decision Making - Short & Long Term; Decision Making with Uncertainty; DCF Techniques; Pricing Policies; Relevant Costs; Budgetary Systems; Evaluation of Fixed/Flexible Zero Based and Incremental; Periodic, Continuous and Activity Based; Budget Review; Performance Measurement; Measurement of Productivity, Activity, Profitability and Quality of Service; Financial v/s Non Financial Measures; Benchmarking; Costing Techniques; Absorption, Marginal and Opportunity Cost Approaches for Specific Orders/Operations; Activity Based Costing; Life Cycle Costing; Target Costing; Standard Costing and Variance Analysis, Significance, Interpretation & Relevance of Variances; Planning & Operational Variances.

**MGT 2101(3) - HUMAN RESOURCE MANAGEMENT**

History Evolution and Developments - Background and Role. Strategy and Culture in HRM - Environmental Approach. Job Analysis and Human Resource Planning. Recruitment and Selection. Performance and Reward Management. Training and Development. Case Study.

**LLC 2206(3) - SUPPLY CHAIN AND LOGISTIC MANAGEMENT**

The Supply Chain and Activities of Logistics; Integrating logistics within an Organisation; Supply Chain Management I: Towards a Strategic View of the Supply Chain, Changing Scope and Direction: Managing the Supply Chain. Supply Chain Management II: Future Trends in Supply Chain Management, Integrating along the supply chain; Planning the Supply Chain: Locating Facilities; Planning Resources: Types of Planning; Capacity and Tactical Planning; Opportunities for Competitive Advantage. Order Processing and Information Systems. Financial Impact of Inventory &

Inventory Management. Managing Materials Flow & Transportation. Decision Strategies in Transportation. Warehousing, Material Handling, Computerisation and Packaging. Procurement ; Analysing a supply chain and measuring performance.

**LLC 2207(3) - PURCHASING AND PROCUREMENT LOGISTICS**

The scope of purchasing; The changing role of purchasing and supply; Proactive Purchasing; Strategic Procurement and Supply Chain Management; Outsourcing; Sourcing Strategies and Relationships; Price and Cost Analysis; Negotiation; Capital Procurement; Retail Procurement; Services Procurement; International and Global Sourcing.

**LLC 2208(3) - OPERATION RESEARCH**

Introduction to OR; Linear Programming Problems and their Graphic Solution; Simplex Method, Duality and Post Optimality Analysis; Transportation and Assignment Methods; Queuing Theory; Replacement Theory; Theory of Games; Simulation; Sequencing; Dynamic Programming.

**LLC 2209(3) - INFORMATION TECHNOLOGY FOR LOGISTICS 2**

Fundamentals of information systems; Information systems for business operations; Decision support systems; Information systems for strategic advantage; Managing information technology; Planning and implementing change; Business process re-engineering; Executive Information systems.

**LLC 2210(3) - DISTRIBUTION AND WAREHOUSE MANAGEMENT**

Warehousing and the Supply Chain; Inventory, Stock Analysis and Product Classification; Inventory Control; Warehouse and Operational Principles; Warehouse Information Communication systems; Supply Chain impacts on stores and warehousing.

**LLC 2211(3) - SIMULATION OF SYSTEMS (SEMINAR)**

Introduction to Discrete Simulation; Hand Simulation exercises; Building simple model on WITNESS simulation software using Machine elements, Labour, Conveyors, Buffers, etc; Input & Output rules, rule editor; Modelling real data, Sampling & Distribution; Modelling stoppages, Variables, Counters; Attributes & graphical elements; assignment & case studies.

**LLC 3101(5) - QUALITY SYSTEMS FOR LOGISTICS**

Quality definitions and history; contributions and philosophies of the quality gurus; Business Excellence Model - MBNQA. Total Quality Management. Quality Leadership. Quality Standards: Organising for TQM. Quality Planning and Error Prevention. Team building and quality. Training for quality. Quality improvement and communication. Introduction to Quality Assurance Tools and techniques. Cost of Quality. Benchmarking.

ISO 9000 Standards – Part 1 & II, ISO 14000 Series, Internal & External Quality Auditing, Statistical Process Control, Control charts for Attributes, Control charts for Variables, Process Capability Indices, Quality Circle, Quality Planning, Continuous Improvement.

**LLC 3102(5) - PORTS OPERATIONS AND SHIPPING ADMINISTRATION**

Ports and their functions; Ships and cargoes; Port equipment; rationale of port business; delivery of services; port infrastructures, conservancy, navigation and handling facilities; nature of port competition; nature and types of port charges; nature of port constitutions and the legal framework of ownership; port development policies; financial management, budgeting and ports operations.

**LLC 3103(5) - HOTEL OPERATIONS MANAGEMENT**

Hotel development Process; Hotel Organization Structure; Operations: Rooms; Housekeeping, Engineering and Security; Food and Beverage Management; Consumer Decision Rules and Implications for Hotels; Hotel Purchasing Function; Human Resource Policy Management; Current Issues in Hospitality Management.

**LLC 3104(5) - AIRLINE MANAGEMENT**

The Airline Industry; Economic Characteristics of Airlines; Airline Management and Organization; Airline Passenger Marketing; Airline Pricing and Demand; Air Cargo; Principles of Airline Scheduling; The Fleet Planning Process; Globalisation and International Aviation.

**LLC 3201(5) - STRATEGIC MANAGEMENT**

Understanding Strategic Management: concept and applications. Environmental Analysis; Introduction to SWOT; Identification of core competences and critical success factors; Competitive Analysis; Porters five forces model; Mission and vision statement formulation of Corporate, Business and Functional Level Strategies; An introduction to tools and techniques used. Strategy implementation: Implications Strategy evaluation and control: case study.

**LLC 3202(5) - INTERNATIONAL BUSINESS MANAGEMENT**

Globalisation; Differences in Political Economy; International Trade Theory; Foreign Direct Investment; Regional Economic Integration; Foreign Exchange; International Monetary system; Strategy of International Business; Entry Strategy and Strategic Alliance; Global Marketing and R & D; Financial Management in International Business; International Relations.

**LLC 3203(5) - INTERNATIONAL BUSINESS LAW**

Growth of international business, approaches towards international economic law/development, principles of conflict of law, regulations of international trade, multilateral trading: GATT.WTO (Environment, Intellectual Property, etc), European Union Model, NAFTA, ASEAN with focus on COMESA and SADC, International Finance: regulation of international economic transactions and actors, e.g. IMF, World Bank, Export/Import: Regulation of Exports and Imports, Tariffs/Custom, Non-tariff barriers, Export promotion, etc.

**LLC 3204(5) - INTERCULTURAL BUSINESS COMMUNICATION AND NEGOTIATIONS**

Why does culture matter? The intercultural challenge. Barriers to intercultural communication and culture shock. Managing diversity and cultural dimension Cultural awareness in international negotiations. Negotiations across cultures. Contact across cultures. Marketing across cultures. International business across cultures. Management and employee relations across cultures.

**LLC 4101(5) - PROJECT MANAGEMENT**

Project Management- An Introduction; Project Life Cycle; Project Scheduling; Gantt Chart; Critical Path Analysis; Project Selection and Project Risk Assessment; Project Resources, Project Manager, Project Team; Project Planning, Budgeting, Project Monitoring & Control; Project Communications; Conflict Management, & Project Termination.

**LLC 4102(5) - LOGISTICS STRATEGY**

Logistics Overview; Logistics and Supply Chain; Supply Chain Concept; Defining Strategy; Aligning Strategies; Value and Logistics Costs; Managing the Lead time Frontier; Supply Chain Planning and Control; Integrating the Supply Chain;; Location Analysis; Logistics System Management; Logistics Systems Controls; International Logistics.

**LLC 4103(5) - BUSINESS RESEARCH METHODS (NOTE 1)**

Primary and Secondary research; Quantitative research designs; Survey design and administration; Designing qualitative research; Case Studies and multi-method design; Analysing quantitative data; Analysing qualitative data; Interpreting research findings and making recommendations; writing up research project report; Introduction to SPSS computer software packages.

Note 1: Business Research Methods will be offered in Semester 7. This module is designed to enable students to develop the appropriate skills for the preparation of their mini project. It is non-examinable and no credit is awarded for it, but it must be satisfactorily completed (Grade S) for the award of the Degree.

**LLC 4104(5) - EVENT MANAGEMENT**

Introduction to conventions, festivals & events management; Basic concepts of conventions, meetings, festivals & events: categories & definitions; Research & Planning concepts of events: developing critical path; relationship between venues and conventions, meetings, festivals & events: indoor and outdoor venues, convention & conference facilities, exhibition facilities; Trade fairs & exhibition shows; Management aspects in convention, festivals and events planning: financial, Human Resources, leadership & supervision, Public Relations, sponsorship & fundraising, effective communication, decision making & negotiations; safety and security issues; impact of events at destinations.

**LLC 4105(5) - RISK MANAGEMENT AND SAFETY**

Basic Concepts and approaches to risk; Risk management and Risk Models; Human Errors and Human Factors; Personality and risk liability; Risk Analysis Techniques; Cost-Benefit Analysis; Safety Management; Occupational Safety; Accident Analysis; Role of stress in safety and risk; Team management for safe performance; Managing Human Risks; Hazards and control Strategies; Maritime Risks.

**LLC 4106(5) - GREEN LOGISTICS AND ENVIRONMENTAL MANAGEMENT**

Introduction to Green Supply Chain; Green Sales and operations planning; Green Procurement; Drivers of Green Logistics; Green Marketing and Packaging; External costs of logistics associated mainly with climate change, air pollution, noise, vibration and accidents; environmental consequences of logistics; Carbon Management, Waste management and Water Pollution.

**LLC 4201(5) - MINI-PROJECT**

This will be a project equivalent to one module and spanning over one semester. Students will be expected to select a specific topic for the project which is aimed at developing the students' understanding of the principles of research and further developing analytical and critical writing skills. Students will be required to submit a project report in the form of 5000- 7500 words as per the prescribed format.

**LLC 4202(5) - INTERNATIONAL LOGISTICS**

Introduction to Global Logistics. Global Logistics Strategies: Organising for Effective Logistics. Strategic Logistics Management: Logistics Performance Measurement, Strategic Logistics Plan and Formulating Logistics Strategy, New Directions in Logistics.

**LLC 4203(5) - SUPPLY CHAIN MODELLING**

Supply Chain Management and Supporting information technologies; fundamentals of optimisation models; unified optimisation methodology for operational planning problems; single flow and multiple flow routing; strategic and tactical supply chain planning; operational supply chain planning; inventory systems.