



UNIVERSITY  
of  
TECHNOLOGY,  
MAURITIUS

**School of Business, Management And Finance**

**BSc. (Hons) Logistics and Transport Management**

September 2009

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## **BSc (HONS) Logistics and Transport Management**

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### **A. PROGRAMME INFORMATION**

The transport industry is a large employer of managerial personnel, providing plenty of career opportunities within any sector of the industry. The BSc (Hons) Logistics and Transport Management has been designed to produce graduates who will work in the high profile transport and logistic industry. The Programme aims to provide prospective students with the management and business skills applicable to this particular industry.

The programme offers 2 exit points at Level 1 and Level 2 which would enable the students to qualify for the award of a Diploma and Degree respectively.

### **B. PROGRAMME AIM**

The programme aims at enabling the students to acquire the necessary knowledge, skills and conceptual framework about Logistics and Transport Management that can be applied in different context.

### **C. PROGRAMME OBJECTIVES**

The main objectives of the programme are as follows:

- develop critical and evaluative thinking in the context of transport and logistic management;
- examine the role of transport and logistics in society;
- explore the critical function of supply chain management;
- appraise the importance of the logistics triangle - transport, location, inventory - to strategic decision making;
- analyse the inter-modal integration between transport modes.

## **PART 1 - REGULATIONS**

### **D. GENERAL ENTRY REQUIREMENTS**

As per UTM „Admissions Regulations“ and „Admission to Programmes of Study at Degree Level“

### **E. PROGRAMME ENTRY REQUIREMENTS**

**Either**

(i) Cambridge School Certificate, with credits in 5 subjects including English and Mathematics

**And**

(ii) Cambridge Higher School Certificate with at least 2 „A“ level subject

**Or**

(iii) at least 3 years relevant work experience in the industry.

### **F. PROGRAMME MODE AND DURATION**

Full Time:                      3 years  
Part Time:                      4 1/2 years

### **G. TEACHING AND LEARNING STRATEGIES**

The programme will employ a wide variety of teaching methods, including lectures, individual or group projects, presentations, workshops, case studies, field visits, work placement and talks by guest speakers. Self-learning will be the key feature of the programme, enabling students to explore, investigate and research into the various topics, interact with practitioners, and work in teams on projects.

### **H. STUDENT SUPPORT AND GUIDANCE**

In addition to traditional lectures, group tutorials or individual tutorials are arranged for students.

### **I. ATTENDANCE REQUIREMENTS**

As per UTM's Regulations and Policy.

### **J. CREDIT SYSTEM**

Modules can carry 3 or 4 credits as per the programme structure. Irrespective of the number of credits allocated each and every module will be assessed on 100 marks. Modules with 4 credits must compulsorily involve submission of at least 2 assignments. The dissertation will carry 9 credits.

The programme consists of only core modules in Level 1, whereas in Level 2 and Level 3 there is a combination of core and elective modules as per the given programme structure.

**Please note** that the modules will only be offered if there is a minimum of 10 students

**Exit points :**

Minimum credits required for the award of a :

- Certificate = 32
- Diploma = 68
- Degree = 108

**K. STUDENT PROGRESS AND ASSESSMENT**

For the award of the Diploma/Degree, all modules must be passed overall with passes in the examinations, coursework and other forms of assessment.

All modules will carry 100 marks and will be assessed as follows (unless otherwise specified):

- written examinations contributing to 70% of the total marks
- Continuous assessment carrying 30% of total marks. Continuous assessment can be based on seminars and/or assignments or class tests.

**Grading**

<b>Grade</b>	<b>Marks x (%)</b>
A	$x \geq 70$
A-	$65 \leq x < 70$
B	$60 \leq x < 65$
B-	$55 \leq x < 60$
C	$50 \leq x < 55$
C-	$45 \leq x < 50$
D	$40 \leq x < 45$
F	$x < 40$
A-D	Pass
F	Fail

**L. EVALUATION OF PERFORMANCE**

The % mark at Level 1 contributes a 20% weighting towards the degree classification.

The % mark at Level 2 contributes a 30% weighting towards the degree classification.

The % mark at Level 3 contributes a 50% weighting towards the degree classification.

**M. AWARD CLASSIFICATION**

**Overall weighted mark y (%)**

- $y \geq 70$
- $60 \leq y < 70$
- $50 \leq y < 60$
- $45 \leq y < 50$

**Classification**

- 1st Class Honours
- 2<sup>nd</sup> Class 1st Division Honours
- 2<sup>nd</sup> Class 2<sup>nd</sup> Division Honours
- 3rd Class Honours

$40 < y < 45$   
 $y < 40$

Pass Degree  
No Award

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### Grading

<b>Undergraduate / Postgraduate</b>		
<b>Overall Marks</b>	<b>Grade</b>	<b>Remarks</b>
$70 \leq X \leq 100$	A	Excellent
$60 \leq X < 70$	B	Very Good
$50 \leq X < 60$	C	Good
$40 \leq X < 50$	D	Satisfactory
$X < 40$	F	Referred

## N. PROGRAMME ORGANISATION AND MANAGEMENT

Programme Director: Dr Chittoo

Programme Coordinator:

Contact Details :

- Room:
- Telephone Number: 234-7624 (Ext. ....)
- Email: .....@utm.intnet.mu

## PART II PROGRAMME STRUCTURE AND PLAN - FULL TIME

### YEAR 1

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	
		L+P				L+P	
PRSC 1401	Transport & Society	2+2	4	PRSC 1402	Transport Operations	2+2	4
MGMT 1101	Organisation & Management	2+1	3	MKTG 1107	Marketing Management	2+1	3
MGMT 1103	Business communication	2+1	3	PRSC 1403	Transport Economics	2+1	3
PRSC 1305	Introduction to Logistics	2+1	3	QUAN 1102	Statistics	2+1	3
ACCF 1102	Financial Accounting	2+1	3	HRMT 1003	Organisational Behaviour	2+1	3
	<b>Start of Level 1</b>				<b>End of Level 1</b>		

YEAR 2

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	
		<b>L+P</b>				<b>L+P</b>	
PRSC 2401	International Carriage of Goods by Sea	2+2	4	LLAW 2211	Alternative Dispute Resolutions	2+2	4
PRSC 2402	Transport Planning & Techniques	2+2	4	QUAN 2203	Quantitative Methods	2+1	3
MGMT 2301	Strategic Management	2+1	3	MKTG 2302	Public Relations	2+1	3
ACCF 2106	Management Accounting	2+1	3	PRSC 2403	Air Transport Operations	2+2	4
LLAW 2210	Employment, Industrial Health and Safety Laws	2+2	4	LLAW 2110	Law of Multimodal Transport	2+2	4
	<b>Start of Level 2</b>				<b>End of Level 2</b>		

**YEAR 3**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>rs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	
		<b>L+P</b>				<b>L+P</b>	
PRSC 3301	Logistics and Distribution Planning	2+2	4	LLAW 3108	Contract Law (in French)	2+2	4
QUAN 3401	Research Methods	2+2	4	PRSC 3402	Sustainable Transport Systems	2+2	4
MGMT 3203	Quality Management	2+2	4	DISS 3000	Dissertation		9
PRSC 3401	Public Transport Policy & Planning	2+2	4	PRSC 3403	Railway Management	2+1	3
LLAW 3305	Commercial Law	2+2	4				
	<b>Start of Level 3</b>				<b>End of Level 3</b>		



**PROGRAMME STRUCTURE AND PLAN - PART TIME**  
**YEAR 1**

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	
		<b>L+P</b>				<b>L+P</b>	
PRSC 1401	Transport & Society	2+2	4	PRSC 1402	Transport Operations	2+2	4
MGMT 1101	Organisation & Management	2+1	3	ACCF 1102	Financial Accounting	2+1	3
MGMT 1103	Business communication	2+1	3	MKTG 1107	Marketing Management	2+1	3
PRSC 1305	Introduction to Logistics	2+1	3				
	<b>Start of Level 1</b>						

**YEAR 2**

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	
		<b>L+P</b>				<b>L+P</b>	
PRSC 1403	Transport Economics	2+1	3	PRSC 2401	International Carriage of Goods by Sea	2+2	4
QUAN 1102	Statistics	2+1	3	PRSC 2402	Transport Planning & Techniques	2+1	3
HRMT 1003	Organisational Behaviour	2+1	3	MGMT 2301	Strategic Management	2+1	3
				ACCF 2106	Management Accounting	2+1	3

	<b>End of Level 1</b>				<b>Start of Level 2</b>		
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**YEAR 3**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	
		<b>L+P</b>				<b>L+P</b>	
LLAW 2210	Employment, Industrial Health and Safety Laws	2+2	4	MKTG 2302	Public Relations	2+1	3
LLAW 2211	Alternative Dispute Resolutions	2+2	4	PRSC 2403	Air Transport Operations	2+2	4
QUAN 2203	Quantitative Methods	2+1	3	LLAW 2110	Law of Multimodal Transport	2+2	4
					<b>End of Level 2</b>		

**YEAR 4**

<b>Semester 1</b>				<b>Semester 2</b>			
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>	<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	
		<b>L+P</b>				<b>L+P</b>	
PRSC 3301	Logistics and Distribution Planning	2+2	4	QUAN 3401	Research Methods	2+2	4
MGMT 3203	Quality Management	2+2	4	PRSC 3401	Public Transport Policy & Planning	2+2	4
LLAW 3305	Commercial Law	2+2	4	LLAW 3108	Contract Law (in French)	2+2	4
					Dissertation		

	<b>Start of Level 3</b>						
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**YEAR 5**

<b>Semester 1</b>							
<b>Code</b>	<b>Module Name</b>	<b>Hrs/Wk</b>	<b>Credits</b>				
		<b>L+P</b>					
PRSC 3402	Sustainable Transport Systems	2+2	4	PRSC 3403	Railway Management	2+1	3
DISS 3000	Dissertation		9				
	<b>End of Level 3</b>						

**Level 1 Semester 1**  
**PRSC 1401 TRANSPORT & SOCIETY**

History of transport, issues in transport and accessibility (urban/rural issues, social exclusion), public transport users, the economics and comparative performance of different, demand for transport and trends.

**MGMT 1101 ORGANISATION AND MANAGEMENT**

Introduction to the different perspectives on management, understanding organizations, the evolution of the concepts of organizations and management; models and types of organizations: the classical and neo-classical organizations and modern approaches to the concepts. Management development; organization development; understanding people: roles, perceptions, norms, values, and attitudes; Human needs; theories of motivation; group dynamics and team building; issues in organization and management theories.

**MGMT 1103 BUSINESS COMMUNICATION**

The benefits of effective business communication, internal and external communication, verbal and non-verbal communication, the process of communication, communication barriers, intercultural communication, teamwork, conflict and communication, writing and presenting business documents, oral presentations, electronic communication, preparing for interviews, customer care and communication.

**PRSC 1305 INTRODUCTION TO LOGISTICS**

Introduction to the Logistics Concept. Historic trends in Logistics. The Distribution Centre: Location analysis and operations. The roles and functions of the logistics service provider e.g. liner company. Logistics and Marketing: Customer service and the design of the distribution channel. Sustainable logistics. Future development in the Logistics industry.

**ACCF 1102 FINANCIAL ACCOUNTING**

Roles and Principles of Financial Accounting, Double Entry Book Keeping, Capital and Revenue Expenditure, Trial Balance, Preparation of Final Accounts for Sole Traders, Non-Profit organisations and Companies, Cash Flow, Statements, Control Accounts and Accounting for VAT, Accounting for Depreciation, Bad Debts and Provisions for Bad Debts, Fundamental Accounting Concepts and International Accounting Standards, Accounting Ratios and Interpretation, Financial Reporting and Users of Accounts.

**Level 1 Semester 2**  
**PRSC 1402 TRANSPORT OPERATIONS**

Transport operations management, determining the demand for transport, determining quality, fleet planning, routing, scheduling, exercising control over operations, vehicle movements and utilisation, and fleet productivity.

## **MKTG 1107 MARKETING MANAGEMENT**

Nature and scope of Marketing, the Marketing Environment, Marketing Research and Marketing Information Systems, Buyer Behavior - the buying behaviour of consumers and organisations, Segmentation, Targeting and positioning Framework, Marketing Mix - the 4P's, Product and Services, Place, Price, Promotion, The extended marketing mix, Services Marketing, Broadening the scope of marketing, Social Responsibility, Green Marketing, Ethics, Customer Relationship Management, Marketing Plan, Marketing Audit, Analysing Industry Attractiveness, BCG Model, Review of Marketing Mix Strategies.

## **PRSC 1403 TRANSPORT ECONOMICS**

Introduction to transport economics, functions and economic interest of transport, modal characteristics, basic components of transport, demand for transport, supply of transport, cost of transport, pricing of transport services, transport and economic development, transport and urban development, Government regulations.

## **QUAN 1102 STATISTICS**

Descriptive Statistics; Probability Concepts; Random Variables; Probability Distributions: Binomial, Poisson and Normal; Estimation with Confidence Intervals; Hypothesis Testing; Chi-Square Tests; Analysis of Variance; Simple Regression and Correlation Analysis; Time Series Analysis.

## **HRMT 1201 ORGANISATIONAL BEHAVIOUR**

Introduction to of Organisational Behaviour, Foundations of individual behaviour, Managing individual behaviour, Personality Theories, Job Satisfaction. Power and Politics. Foundations of Group Behaviour and Group Dynamics. Communications and Decision-making. Conflict Management. Organisational Culture. Organisational Development.

### **Level 2 Semester 1**

## **PRSC 2401 INTERNATIONAL CARRIAGE OF GOODS BY SEA**

Global trade and maritime logistics, port requirements, port competition, liner alliances, fleet management, routing and scheduling, intermodalism, security, and technology in maritime logistics. The different types of carriage contracts. How bills of lading contracts arise out of good being carried under charterparties. The aims of the international carriage regimes. Bills of lading contracts. Bills of lading as evidence of the contract of carriage. Bills of lading as the contract of carriage. The consignee's right of suit on the contract of carriage. The Hague-Visby Rules The application of the Rules. A comparison with the Hague and Hamburg Rules. The carriage of goods in chartered ships.

## **PRSC 2402 TRANSPORT PLANNING & TECHNIQUES**

Transport and Travel in the Last Forty Years, The Evolution of Transport Planning: The 1960s and 1970s, Developments in Planning Analysis and Evaluation, Radical Policy Change, Contemporary Transport Policy. The Limitations of Transport Planning, Overseas Experience, The Role of

Transport Planning.

## **MGMT 2301 STRATEGIC MANAGEMENT**

Strategic Planning: Tools & Techniques, Managing in a business context, Stakeholder analysis. Environmental scanning : SWOT analysis, value chain, port folio analysis(BCG Matrix, GE Matrix). Strategy formulation: Ansoff Matrix, Porter's Generic Strategies( cost leadership, differentiation, focus) , identification and evaluation of strategic alternatives. Strategy implementation: framework for understanding and implementation issues. Tactical aspects of strategy implementation. Strategy evaluation & control. Integrative case analysis.

## **ACCF 2106 MANAGEMENT ACCOUNTING**

Role of Management Accounting and its link to Financial Accounting; Cost Allocation and Activity-Based Costing; Costing methods and Costing principles; Relevant costing and Contribution analysis; Cost - Volume Profit Analysis; Budgeting Planning and Control; Standard costing and variance analysis; Modern Trends in Management Accounting- Life cycle Costing, Benchmarking.

## **LLAW 2210 EMPLOYMENT, INDUSTRIAL HEALTH AND SAFETY LAWS**

Contract of Employment; Conditions of employment; Employer/ employees duties and obligations; Termination of contract of Employment; Workfare Programme; Compensation; Violence at work, Labour Advisory Council; Functions of the Labour Advisory Council; Regularly bodies and Courts; Present Legislation, Scope of the Act. Development of Occupational Health and Safety Law. General Duties under the act. Environment Studies. Offences, Penalties and Legal Proceedings. Insurance: Effect of Insurance on health and safety at work and employer's liability insurance. Comparative Health and Safety Legislation.

### **Level 2 Semester 2**

## **LLAW 2211 ALTERNATIVE DISPUTE RESOLUTIONS**

Arbitration, Conciliation, Mediation and Negotiation; Advantages of Alternative Dispute Resolution; The Arbitral Agreement; Arbitral Award and Enforcement; Arbitral Tribunal and Proceedings; Appeals.

## **QUAN 2203 QUANTITATIVE METHODS**

Introduction to Quantitative Methods; Decision Analysis: Decision-Making Environments and Decision Trees; Linear Programming: Graphical and Simplex Method, Sensitivity Analysis; Transportation Models; Assignment Models: minimization and maximization cases; Network Analysis; Inventory Models.

## **MKTG 2302 PUBLIC RELATIONS**

Understanding Public Relations, ethics of Public Relations, PR Department v/s PR Consultants, planning programmes, news media, press relations, budgeting, evaluating PR results, marketing research in Public Relations, management employee relations, crisis PR, special uses and new developments in PR.

## **PRSC 2403 AIR TRANSPORT OPERATIONS**

The economics of operating airlines and airports and the implications of competitive strategies for, marketing, the management of alliances and revenue management, Airport planning, externalities of airports, pricing airport use, the development of hubs and networks.

## **LLAW 2210 LAW OF MULTIMODAL TRANSPORT**

The background, the role of the freight forwarder, changes in the shipping industry and the impact of containerisation, unimodal transport compared with multimodal transport, the combined transport operator, the status of a multimodal bill of lading, the ICC Rules for a combined transport document, the Multimodal Convention 1980, the UNCTAD/ICC Rules for multimodal transport

### **Level 3 Semester 1**

## **PRSC 3301 LOGISTICS AND DISTRIBUTION PLANNING**

The developments in logistics, key strategic role of logistics, supply chain strategies, lean logistics, efficient customer response, the design and implementation of logistics strategies, the continuing integration of the supply chain, developments in e-commerce, the effects of lean and agile operations, measuring and improving performance, environmental issues and international views of logistics, GIS.

## **QUAN 3401 RESEARCH METHODS**

Introduction to Research Methods; Research Ethics and Values; Research problems; Components of a Research Proposal; Planning the Research Process: Qualitative and Quantitative Research, Research Design; Handling of data and Analysis of data; Reporting of Research.

## **MGMT 3203 QUALITY MANAGEMENT**

Introduction to Quality Management (QM), Antecedents of Modern QM, Accelerating use of QM, Definition of Quality, Control, Quality and Business Performance, Service Quality vs. Product quality, Strategic QM, Service Quality, Service Quality and Customer retention, Buyer/Supplier relationships, Benchmarking, Organising for Total Quality management, Productivity and Reengineering, The Cost of Quality, Universal Standards of Quality (ISO 9000, ISO 14000).

## **PRSC 3401 PUBLIC TRANSPORT POLICY AND PLANNING**

Demand for transport and trend, issues in transport and accessibility, the economics and comparative performance of different modes, the regulatory and institutional framework (definitions, rationale, alternative market options (private versus public ownership, deregulated versus regulated markets, competitive versus performance based contracts, illustrated by world-wide examples); financial environment of public transport (review of business principles, what is subsidy? Illustrated by examples of different systems in practice); planning/operation (public transport as part of transport system, which mode of public transport suits what conditions?, strategic network planning and its relation to land use, public transport constraints, the case for public transport, global experience and lessons for public transport), planning pricing and marketing, innovations in rural transport, quality enhancement and the role of benchmarking.

## **LLAW 3305 COMMERCIAL LAW**

(i) *Agency*. The nature and creation of the principal and agent relationship and the scope of the agent's authority. The position of the principal and agent vis-a-vis third parties; Rights and duties of principal and agent; Termination of agency. (ii) *International Trade and Finance*. C.I.F., F.O.B. and other special forms of international sales. Vienna Convention on International Sales. The financing of international sales. Carriage of goods by sea and the rights and duties of the sea carrier. (iii) *Principles of Secured Financing*. The classification and characteristics of credit and security. Creation, perfection and priorities. The floating charge. Specific Forms of Secured Business Finance: conditional sale, hire purchase and the finance lease.

### **Level 3 Semester 2**

## **LLAW 3108 LA LOI DU CONTRAT (CONTRACT LAW)**

La classification des contrats, Les conditions de la validite d'une convention (Article 1108): consentement, capacite de contrater, objet certain, cause licite, La nullite du contrat (action en justice et non de plein droit), Les effets du contrat (force obligatoire, effet relatif), La fin du contrat (cessation), L'obligation des parties et les consequences, Exoneration (force majeure) Les Dommages et Interets.

## **PRSC 3402 SUSTAINABLE TRANSPORT SYSTEMS**

Major environmental issues considered in contemporary transport and logistics operations including climate change, regional and local air pollution, noise pollution, amenity and safety, trends working against sustainability and the range of regulatory, behavioural, pricing, and voluntary strategies available to try to reverse these trends, "green" logistics and what regulators and companies can/should be doing to facilitate more sustainable practices in the shipment of freight, sustainable aviation and international shipping practice, carbon emission.

## **PRSC 3403 RAILWAY MANAGEMENT**

Railways in the pre-mechanical era; railway finance; international perspectives on railways and economic development; the impact of railways on urban and rural societies; historical geography of railways; railway labour; contemporary railway policy; sociological and historical perspectives on technical change; the history of railway architecture.

## **DISS 3000: DISSERTATION**

A 10,000-12,000 words dissertation will have to be submitted at the end of the semester. The work submitted should conform to the Undergraduate Dissertation Guidelines.